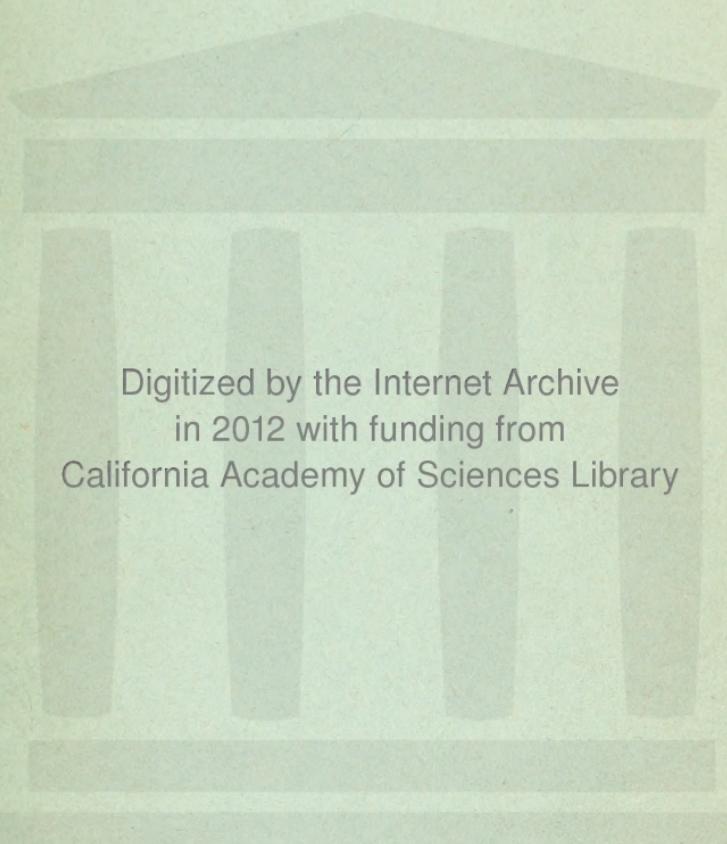


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ITER HISPANIENSE

OR A SYNOPSIS OF

PLANTS COLLECTED

IN THE SOUTHERN

PROVINCES OF SPAIN AND IN PORTUGAL,

WITH GEOGRAPHICAL REMARKS,
AND OBSERVATIONS ON RARE AND UNDESCRIPTED SPECIES,

BY

Philip Barker Webb.

Ἐσπερίδων — —
— ὀλειόδωρος — ζάθεα
Χθόνι. — (EURIP., *Hippol.*)

PARIS,

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—
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LETTRES D'ESPAGNE

PAR M. DE LA ROCHEFORT

ADAPTÉES A LA JEUNESSE PAR M. DE LA ROCHEFORT

EDITION AUGMENTÉE PAR M. DE LA ROCHEFORT

1814

PARIS : CHEZ L'IMPRIMERIE DE BÉTHUNE ET PLON.

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(Complexe, double) — — — — —

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ADAPTÉES A LA JEUNESSE PAR M. DE LA ROCHEFORT

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PARIS, IMPRIMERIE DE BÉTHUNE ET PLON,

56, rue de Vaugirard.

K 328
N 43

TO

SIR WILLIAM JACKSON HOOKER,

KNIGHT OF THE ROYAL HANOVERIAN ORDER

LL. D. F. R. A. AND L. S.

MEMBER OF THE IMP. ACAD. NAT. CUR. ETC. ETC. ETC.

HONORARY MEMBER OF THE ROYAL IRISH ACADEMY,

OF THE ROYAL MEDICAL AND CHIRURGICAL SOC. OF LONDON,
ETC. ETC.

REGIUS PROFESSOR

OF BOTANY IN THE UNIVERSITY OF GLASGOW.

THIS LITTLE TRACT

IS DEVOTEDLY INSCRIBED

BY THE AUTHOR.

PREFACE.

Ten years have elapsed since, embarking from Belem at the mouth of the Tagus for the island of Madeira, I took leave of the Spanish peninsula. During two years, from the spring of 1826 to the 6th of May 1828, I had examined more or less the whole of that fertile region, which extends along the shores of the Mediterranean from the foot of the Pyrenees to the mouth of the Guadalquivir; the neighbouring coast of Africa from the mountains around Tetuan to the south of Cape Spartel; and the greater part of Portugal, from Braga in the north to the chains of Cintra and Arrabida in the south. Two years afterwards on my return from the Canaries, in company with M. Berthelot, I again saw Gibraltar and its environs, whence we sailed to the low islet of Alboran, beyond the mid channel of the Mediterranean betwixt Spain and Barbary. From thence, the wind not permitting us to make Melilla, we left behind us, not without regret, the lofty mountains of the province of El Rif in Morocco, and cast anchor amongst the three islands now called the Zapharines. From these we finally touched at Oran and Algiers, disturbed at that time both by their recent conquest, and the political dissensions of the conquerors, and altogether unfitted for our peaceful pursuits.

Such was the course of a journey too short if mea-

sured by the space explored, and too quickly accomplished, if regard be had to the interest attached to the localities. Turned always towards the south, I did not stop till I reached Madeira and the Canaries, hastily collecting on the way such objects as the season offered. Much therefore is left undone in these rich fields of Flora, in which, notwithstanding the gleanings of learned men from Clusius to Bory de Saint-Vincent, the labourers have been too few for the abundance of the harvest. Since then M. Rambur a zealous zoologist and author of a Fauna of Andalusia has brought with him from the same country a valuable collection of plants a part of which owing to his kindness, and that of M. Decaisne, I have been enabled to examine. M. Edmond Boissier of Geneva last of all in 1837 has carefully explored the whole kingdom of Grenada, and the botanical world will in a short time profit by the results of his interesting investigations, concerning which a short notice has already appeared in the *Bibliothèque universelle* of Geneva, and the compositæ in the Prodromus of Professor de Candolle. As soon as I received these works I changed the names which I had previously given to many of the species therein described.

Other pursuits and various accessory causes have retarded the study of my Spanish herbarium, and it was only towards the end of 1837 that I began to select from it the species which appeared altogether undescribed, and such as seemed to need further illustration. The drawings and plates of many of these are already finished, but as this is a work of much outlay both of money and time, I have followed the example of many

esteemed authors and anticipated its publication by a prodromus or synopsis of its contents. This has been the origin, and intention of this little tract; in executing it, I have added thereto a list of such species as though long known in other regions were unlooked for denizens of the Spanish soil, and others concerning which it seemed desireable to have confirmed accounts, or precise localities. I have passed over most of those species which are common every where the borders of the Mediterranean, and many more which the imperfect nature of the specimens rendered it difficult to decide upon, nor have I named Portuguese plants, when already cited by Brotero, except for some special purpose either of elucidating rarer species, or of recording new stations. This little catalogue thus composed will perhaps be not altogether unuseful as tending to illustrate the vegetable geography of the northern hemisphere. On this account I have frequently insisted in the notes on the affinities, which have been rarely attended to, of the distribution of species at the two extremities of the Mediterranean under the same latitude, and this not in herbs and annuals which travel easily, but in permanent or arborescent species, and in mountain vegetation. The Canarian Flora first drew my attention to this subject. Our knowledge likewise of the vegetation of southern Europe, which has been the object of too many isolated labours, is obstructed by a mass of puzzling synonyms. As far as time and circumstances would permit, I have striven to clear away some of this accumulation of Augean rubbish, and where I shall be found to have erred, the cause of error will have doubt-

less proceeded rather from the wish to unite the same forms, than from any desire to create new names.

Let us hope that this, and similar works may at length awaken the Spanish botanists from that $\delta\pi\eta\eta\lambda\eta\theta\alpha\rho\gamma\eta\eta\beta\alpha\theta\eta\eta$, in which they have too long indulged. It is to them alone that we must look for a complete catalogue of the richest and most varied Flora of Europe, for as Pliny truly says, after Italy the garden of the world, « exceptis Indiæ fabulosis, proximè quidem duxerim Hispaniam, quācumque ambitur mari. »

A SYNOPSIS
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PLANTS COLLECTED
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ALGÆ ⁽¹⁾.

SPHÆROCOCCUS (GIGARTINA) GADITANUS. Montag. in Herb. Webb.

S. fronde cartilaginea, filiformi, dichotomâ, aculeis simplicibus, brevissimis, subsecundis, utrinque acuminatis obsitâ.

Hab. In sinu Gaditano.

Obs. Our species is very nearly allied to *Sphærococcus armatus* of Agardh, published in the *Flora oder Botanische Zeitung*, 1827, pag. 645, if I may judge from the very brief diagnosis supplied by that celebrated algologist. As I propose giving a figure and detailed description of this as well as of the following species in the iconography of Mauritanian and Spanish plants preparing by Mr. Webb, it will suffice to mention here that the aculei simple in our plant are described as bifurcated in that of M. Agardh. I must however confess that I have observed two or three cases of bifurcation in our plant, but it is to be remembered that in the *S. armatus* Ag. this character is essential and not exceptional as in our plant. M. Agardh compares his plant to *Sphærococcus compressus*, from which he says it differs by its being rose coloured and not olivaceous. Our plant is of a dark purple colour approaching through desiccation to black, and has nothing whatever in common with *S. compressus* Ag. I doubted at first whether it might not belong to one of the many forms of *S. confervoides* Ag. but its internal structure, as I shall hereafter show, is entirely distinct and very peculiar.

(1) For the following description of two interesting species of Algae I am indebted to my excellent friend Dr. Montagne.

DELESSERIA INTERRUPTA. Ag. (Spec. Alg. 1. pag. 179.)

D. fronde (membranaceâ, tenuissimâ), interruptè costatâ, linearî, dichotomâ, apice furcatâ, rotundatâ.

HAB. Ad Gades, ubi primus omnium invenit illustris canonicus Cabrera, eamque cum Agardhio communicavit. In eodem loco legit P. B. Webb.

OBS. It is much to be regretted that Mr. Webb's herbarium contains only a single specimen of this rare and beautiful plant, and that too without the fructification which is still unknown. It is easily distinguished from all others of its tribe by the midrib of the frond interrupted at intervals, and as a very distinct species fully merits the honour of a figure.

C. MONTAGNE.

MONOCOTYLEDONEÆ.

COIX LACRYMA. Linn.

HAB. Circâ *Coin* et *Laurin* spontaneam legit Hanseler.

PHLEUM PRATENSE β NODOSUM. Trin.

HAB. In summis jugis *Alpium Eliberitanarum*, *La Sierra Nevada*.

HOLCUS CÆSPITOSUS. Boiss.

H. radice fibrosâ, culmo ramoso, decumbente; paniculâ ovatâ laxâ; flôsculo utroque aristato, aristis recurvatis calycem excedentibus.

Holcus cæspitosus Boiss. *Notice sur l'Ab. Pinsapo*, pag. 12.

HAB. In jugis excelsis montium Eliberitanorum, hodiè de *la Sierra Nevada*, ad radices summi montis *El Picacho de la Veleta*.

ANTHOXANTHUM OVATUM. La Gasc.

HAB. In montibus Bæticæ, *La Sierra de Agua*.

MACROCHLOA ARENARIA. Kunth.

HAB. Ad lacum Valentimum Hispaniæ Tarragonensis, in montibus *Sierra de Agua*, *Sierra Tejeda*, et alibi in Bæticâ, necnon ad promontorium Barbaricum Lusitaniae.

STIPA PENNATA. Linn.

HAB. In rupibus montis *Sierra Tejeda*.

STIPA PARVIFLORA. Desf.

HAB. In agro Tarragonensi.

SPOROBOLUS PUNGENS. Kunth.

HAB. In montibus siccis, circà Gades et in montium jugis *de la Sierra Nevada.*

CHÆTURUS FASCICOLATUS. Link.

HAB. In pinetis circà oppidum *Chiclana.*

ARUNDO MAURITANICA. Desf.

HAB. Ad promontorium Charidemum et alibi in Bæticâ.

AMPELODES MOS TENAX. Link.

HAB. In montosis propè *Hospitalet* in Gothalauniâ.

PHRAGMITES COMMUNIS? Trin.

HAB. Circà Malacam urbem in arenosis.

ECHINARIA CAPITATA. Desf.

HAB. In agro Tarragonensi et in montibus Bæticæ *Las Alpujarras.*

AIRA CAPILLARIS. Linn.

HAB. Circà thermas Malacitanas *de Carratraca.*

ARRHENATHERUM PALLENS. Link.

HAB. In montosis apricis circà Malacam, legi etiam in monte Arabrigâ propè Cenobrigam in Lusitaniâ.

POA LITTORALIS. Gouan.

HAB. In collibus arenosis circà lacum Albuferam Hispaniæ Tarragonensis.

POA BULBOSA. Linn.

HAB. In montibus circà *Alcalá de los Gazules*, et alibi in Bæticâ.

MELICA NUTANS. Linn.

HAB. In montosis Bæticæ *las Alpujarras*, et in collibus Malacitanis.

KOELERIA PHLEOIDES. Pers.

HAB. Circà Malacam.

SCHISMUS MARGINATUS. Pal. de Beauv.

HAB. Circà Malacam.

DACTYLIS GLOMERATA. Var. MICROSTACHYS.

HAB. In vertice montium Eliberitanorum, *la Sierra Nevada.*
CYNOSURUS ELEGANS. Desf.

HAB. Circà Gades.

FESTUCA DIVARICATA. Desf.

HAB. In Bæticæ collibus vulgaris.

FESTUCA ALOPECURUS. Schousb.

HAB. Propè Olisiponem in arenosis Transtaganis.

FESTUCA DURIUSCULA. Var. **CURVULA.** Kunth.

HAB. Propè verticem montium Eliberitanorum *la Sierra Nevada* ad basin montis *el Picacho de la Veleta.*

FESTUCA POA. Kunth.

HAB. In arenosis trans Tagum, non longè ab Olisipone.

FESTUCA UNILOIDES. Kunth.

HAB. In montibus siccis circà Malacam.

FESTUCA INTERRUPTA. Desf.

Festuca Fena La Gasc.

HAB. In montosis circà Tarraconem.

TRITICUM CÆSPITOSUM. DC.

HAB In collibus aridis Bæticæ vulgarè, etiam in montibus Eliberitanis *la Sierra Nevada.*

TRISETUM LOEFLINGIANUM. Pal. de Beauv.

HAB. Circà Malacam.

ELYMUS CAPUT MEDUSÆ. Linn.

HAB. Circà Malacam.

LEPTURUS SUBULATUS. Kunth.

HAB. In arenosis Bæticæ, et circà lacum Albuferam agri Tarraconensis.

IMPERATA ARUNDINACEA. Cyr.

HAB. A Dertosâ oppido per totam Bæticam.

CAREX AGASTACHYS. Ehrh.

HAB. Circà Eliberim.

CAREX BILIGULARIS? DC.**HAB.** Circà Tarragonem.**CAREX BINERVIS.** Smith.**HAB.** Circà Olisiponem in paludibus Transtaganis.**CAREX DISTANS.** Linn.**HAB.** A Barcinone ad Malacam.**CAREX EXTENSA.** Good.**HAB.** Circà Malacam.**CAREX GLAUCA.** Scop.**HAB.** In monte Arabrigâ.**CAREX GYNOBASIS.** Vill.**HAB.** In montosis circà Alcalá de los Gazules.**CAREX HISPIDA.** Schrank.*C. echinata* Desf.**HAB.** In agro Saguntino.**CAREX RIPARIA.** Curt.**HAB.** Circà Tarragonem.**CAREX VULPINA.** Linn.**HAB.** Circà Tarragonem, Eliberim, et alibi in Bæticâ.**CAREX FURVA.**

C. humilis, cæspitosa, glaberrima, radice fibrosâ ; spicis 3 sessilibus, in capitulum 3-lobum aggregatis, omnibus androgynis, basi imâ masculis ; squamis ellipticis, acutiusculis, muticis ; utriculis squamâ longioribus, plano-convexis, ovato-oblongis, utrinquè striatis, ad angulos lèvissimis ; stigmatibus 2.

HAB. In jugis montium Eliberitanorum ad cacumen alterum *el Picacho de la Veleta*.

OBS. This species is very distinct from all its congeners. Its size, the number and the colour of its spikes, which are united, and the disposition of the sexes, bring it near to *C. Vahlii* Schk. and to *C. parviflora* C. A. Meyer, both of which however are distinguished from it by their trifid styles and other changes of conformation. *C. nigra* All. differs from it likewise by the number of its styles, and by its four or five spikes, of which one or two of the inferior are bracteated, and slightly pedicellated, whilst the upper is for the most part entirely male. Nor can it be compared to any of the 2-styled species unless it be to *C. microstyla* Gay. (in Gaud. Fl. Helv. 4, pag. 37, tab. 1.) or to *C. foetida* All. but both of these are immediately recognized by their many-spiked capitules, and by their very different habit and loftier stature. *C. microstyla* recedes from it moreover by its pale greenish capitule, bracteated at the base, and by its utri-

culles being shorter than the scale, smooth, somewhat scabrous at the edges, whilst *C. foetida* is easily distinguishable by its male flowers being situated not at the base but at the summit of the spikelets ! and by having the points of its utricles bidentated.

CLADIUM GERMANICUM. Schrad.

HAB. In aquosis circà Sancti-Caroli oppidum in Hispaniâ Tarragonensi.

SCIRPUS MARITIMUS. Linn. **Var. MONOSTACHYIA.**

HAB. Circà Malacam, et ad lacum Albuferam Hispaniæ Tarragonensis.

CYPERUS LONGUS. Linn.

HAB. In paludosis agri Saguntini.

CYPERUS BADIUS. Desf.

HAB. Circà oppidulum Sancti - Roccii propè Calpen promontorium, et alibi in Bæticâ.

CYPERUS PALLESCENS. Desf.

HAB. In Bæticæ locis inundatis.

CYPERUS JUNCIFORMIS. Desf.

HAB. In aquosis ad Charidemum promontorium, et alibi in Bæticâ, et in Hispaniâ Tarragonensi vulgaris.

CYPERUS OLIVARIS. Targ.

HAB. Circà Malacam, Hispalim, et alibi in Bæticâ.

CYPERUS ERAGROSTIS. Vahl.

HAB. Propè Malacam ad vicum *Churiana*.

ISOLEPIS HOLOSCHOENUS. Roem. et Schult.

β. *Romana*.

γ. *Australis*.

HAB. α Circà thermas oppiduli Carratraca, β in arenosis agri Saguntini, γ ad ripas fluminis *Guadalhorce* propè Malacam.

JUNCUS GLAUCUS. Linn.

HAB. In pratis altioribus Alpium Eliberitanarum, *la Sierra Nevada*.

JUNCUS ECHINULOIDES. Brot.

HAB. Circà Malacam in fossis.

MERENDERIA BULBOCODIUM. Ram.

HAB. In pinetis Gaditanis, et in Alpibus Eliberitanis *de la Sierra Nevada.*

SCILLA MONOPHYLLA. Link. (*in Schrad. journ. 1779, pag. 319*).

S. pumila Brot.

HAB. Cum Scillâ Italicâ Linn. in collibus circâ *Alcalá de los Gazules*. In Algarbiâ (Broussonet in herb. Desfont.). Legi etiam circâ Olisiponem.

FRITILLARIA PYRENAICA. Linn.

F. Meleagris Brot? *F. Lusitanica* Wikst?

HAB. In montosis circâ *Alcalá de los Gazules* in Bæticâ. Legi etiam in regione Transtaganâ circâ Olisiponem.

ASPARAGUS APHYLLUS. Linn.

HAB. Plurimæ hujus speciei varietates, quarum una forsitan *A. horridus* Linn. cum *A. albo* in multis Bæticæ collibus occurunt.

SMILAX MAURITANICA. Desf.

HAB. Per omnem Bæticam cum *S. aspera* vulgaris.

LAPIEDRA MARTINEZII. La Gasc.

HAB. In rupestribus, propè Abderam oppidum in Bæticâ.

NARCISSUS VIRIDIFLORUS. Schousb.

HAB. In arenosis maritimis oppidi *Algesiras*.

NARCISSUS JUNCIFOLIUS. La Gasc.

N. foliis filiformibus, rigidis, acutis, convolutis, scapo gracili, subbifloro, brevioribus; petalis ovato-lanceolatis, mucronulatis.

N. juncifolius alter Clus. *Rar. Stirp. Hisp.* pag. 250.

C. Bauh. Pin. pag. 51. *Magnol. Bot. Monsp.* pag. 182.

N. juncifolius minor Clus. *Hist. vol. 1.* pag. 159.

N. juncifolius La Gasc. *Gen. et Sp.* pag. 13. *Req. in Lois. Nouv. Not.* pag. 14 et *Fl. Gall.* ed. 2. pag. 237.

HAB. Legi mense martio in rupestribus montis *Montserrat*, in Hispaniâ Tarragonensi; habui etiam è provincia Gallicâ montibus saxosis. Inter Hispalim et Gades invenit Clusius, in Bæticâ La Gasca.

NARCISSUS JONQUILLA. Linn.

N. foliis angustis, carnosis, angulosis, obtusiusculis, scapo 2-6-floro longioribus; petalis lanceolatis acutis.

N. juncifolius prior Clus. *Rar. Stirp. Hisp.* pag. 250.

N. juncifolius 2 Clus. *Hist. vol. 1.* pag. 159.

N. Jonquilla Linn. (*excluso syn. Clusii Narciso juncifolio minore*).

HAB. Mense februario florentem in rupestribus herbidis propè oppidulum *El Pedroso* inveni, ad latus meridionale montis Mariani, ubi Anam fluvium et Emeritam Augustam à planicie Hispalensi dirimit. Legit Clusius in pratis montosis, non procul Toleto et circâ *Guadalupe*.

OBS. These two species, confounded by Linnæus, probably from his not having seen wild specimens, were well defined, and rightly distinguished by Clusius. His figures somewhat uncouth give nevertheless a good general idea of the differences between them. But the relative length of the leaves and the scape is overlooked, though it appears to me that this character is sufficiently constant and remarkable in the native specimens. The jonquil had not been met with in its wild state since the time of the Flemish botanist, from whose bulbs imported into the gardens of the low countries all those cultivated in Europe have since sprung. It appears to be entirely a Spanish plant confined to the grassy slopes on either side of the long line of the Sierra Morena, it is possible however that it may be found hereafter on the chain of Atlas. The *N. juncifolius* grows in the hotter and drier region around the Mediterranean gulph, though likewise still unnoted on its African shores. It was first registered in the Flora of Provence by Magnol under the original name of Clusius adopted by G. Bauhin, but since the time of Linnæus had been considered as the wild type of the garden jonquil, till their difference attracted the attention of two botanists who both as if of common accord gave it the same name, but the name as given by la Gasca is anterior by eleven years to that of Requier.

LEUCOIUM AUTUMNALE. Linn.

HAB. In arenosis præsertim maritimis Bæticæ; legi propè Carteiam et ad promontorium Junonis.

LEUCOIUM TRICHOPHYLLUM. Schousb. Rchb. Pl. Crit. VIII. p. 703. Ic. opt.

HAB. In arenosis Bæticæ vulgare. Legi propè Gades, et circâ Olisiponem in arenis auriferis trans Tagum flumen.

OBS. This plant differs by its two-leaved spathe, its larger blos-

soms, and other particularities, as well as by its time of flowering from the preceding. The former flowers abundantly in october and november immediately after the first autumnal rains. I have even found it in flower before the rains in the middle of August in the Zapharine Islands on the African coast, whereas the *Leucoium trichophyllum* does not blossom till later. Brotero (Flor. Lus., vol. 1, pag. 552) is disposed to consider the two plants as varieties, but I am inclined to the opinion of my late excellent friend Sir Peter Schousboe that it is necessary to distinguish them specifically.

LAPIEDRA MARTINEZII. La Gasc.

HAB. In rupestribus propè Abderam urbem in Bæticâ.

CROCUS SEROTINUS. Salisb.

HAB. In pinetis Gaditanis, et in Alpibus Eliberitanis *de la Sierra Nevada.*

IXIA BULBOCODIUM. Linn.

HAB. In montosis circà *Alealá de los Gazules.*

IXIA PURPURASCENS. Ten.

HAB. In montosis herbidis Bæticæ circà Malacam.

IRIS JUNCEA. Desf.

I. Lusitanica. Ker.

HAB. Circà Tarragonem, et in collibus Cintrans Lusitaniæ.

IRIS ALATA. Lamck.

I. bulbosa latifolia 1. Clus. Rar. Plant. Hisp. pag. 274.

I. scorpioides Desf.

HAB. Per omnem Bæticam vulgaris.

ORCHIS SIMIA. Lamck.

O. tephrosanthos Vill.

β *undulatifolia.*

O. longicruris Link.

O. undulatifolia Biv.

HAB. α In montosis circà *Alcalá de los Gazules*, in monte Arabrigâ, et alibi in Bæticâ et Lusitaniâ. β Circà Malacam.

ORCHIS SACCATA. Ten.

HAB. In arenosis Gaditanis.

DICOTYLEDONEÆ.

JUNIPERUS VULGARIS. Linn.

 β alpina.HAB. Propè Cardonem et in montibus Bæticæ *de la Sierra Tejeda*, ubi frutex depressa baccis magnis. β In summo Lusitaniæ monte Juresto.

JUNIPERUS MACROCARPA. Sibth.

HAB. In pinetis oppido Foro Luciferi proximis, et in Gaditanis mare versus propè *Barroso*.

JUNIPERUS SABINA. Linn.

HAB. In montibus Eliberitanis.

PINUS LARICIO. Lamck.

HAB. In monte *Monserrat* montibusque *Barcino*nensibus circumjectis, halepensi intermixta, quâcum tamen nunquam in maritimis devehitur.

PINUS BRUTIA. Ten?

HAB. In pinetis Gaditanis.

QUERCUS DECIDUÆ (1).

QUERCUS ROBUR. Linn.

 α pedunculata.

(1) To make the list of oaks as useful as possible and to give a general idea of their distribution around the western termination of the Mediterranean I have united here my Spanish and Mauritanian catalogues, and traced as far I was able their expansion in other directions. I regret that the loss by shipwreck of my collection made in Portugal in the autumn of 1827 renders this part less interesting than I could have wished.

β sessiliflora.

γ pubescens.

HAB. In Hispaniâ Tarraconensi, et in Lusitaniâ frequens, ubi in montibus Cynthiæ sive *de Cintra* varietatem pedunculis insigniter elongatis adnotavi.

QUERCUS TOZA. Bosc.

Q. pubescens Brot. *Fl. Lus.* vol. 2. pag. 31. non Willd.

HAB. Arbor excelsa in alpibus Eliberitanis *de la Sierra Nevada*, in monte *Sierra Tejeda*, et alibi in Bæticâ. In montosis ad flumen Durium, ad promontorium *Magnum*, et in totâ Lusitaniâ frequens.

OBS. The geographical expansion of this species is much wider than is generally supposed. I gathered it not only in Spain plentifully but likewise in the woods around the Bosphorus and in the valley of Domouz Dereh on the Black sea. It will doubtless be met with in other intermediate points between these widely separated stations.

SUBDECIDUÆ.

QUERCUS HUMILIS. Lamck.

Robur V. Clus. *Rar. Plant. Hisp.* pag. 24. *Robur VII.* vol. 1. pag. 19. *Lobel. Ic.* vol. 2. pag. 157.

Quercus fruticosa Brot. *Fl. Lus.* vol. 2. pag. 31.

Quercus prasina Bosc.

HAB. Non longè à freto Herculeo ad septentrionem viculi *Los Barrios*, et ad occasum oppiduli Sancti-Rocci, ubi sylvis Quercus Lusitanicæ proceris planities alta atque inculta supereminet. In campus aridis Lusitaniæ mediæ et meridionalis communis. In tractu aspero et ventoso sub vertice montis Magni seu *Djibbel Kibir Tingitanorum*.

OBS. This is altogether a southwestern species. I believe the neighbourhood of Gibraltar to be its easternmost station. It entirely covers the arid tracts where it appears, reaching a height of from 6 inches to 3 feet, though I have seen at times bushes which had attained 12 or more. I have compared it with the plant described by Bosc, and find it to be identic with his *Quercus prasina*.

QUERCUS LUSITANICA. Lamek.

Q. foliis ovatis, aut ovato-lanceolatis, coriaceis, lucidis, subtûs pallidis, junioribus tomentosis, margine undulato-serratis, dentibus acutis, aut crenatis, basi rotundatis, aut cordatis; eupulæ subsessilis

squamis adpressis, lanatis, subciliatis; glande conicâ, aut cylindra-
ceo-elongatâ.

β Bætica foliis majoribus, subplanis, margine obtusè
crenatis, fructu maximo.

γ Salzmanniana foliis crenatis, basi attenuatis,
castaneæ-formibus, junioribus amentisque mas-
culis dense floccoso-lanatis, lanâ deciduâ.

Robur III et IV. Clus. Rar. Stirp. Hisp. pag. 22 et 23.

*Robur IV et V. Clus. Hist. vol. 1. pag. 18 et 19. Lob.
Ic. pag. 158 et 159.*

Quercus Lusitanica Lamck encyc. tom. 1. pag. 712.

Quercus faginea Lamck encyc. tom. 1. pag. 718.

Quercus Valentina Cav. Ic. vol. 2. pag. 25. tab. 129.

Quercus australis Link.

Quercus hybrida Brot. Fl. Lus. vol. 2. pag. 31.

Quercus infectoria Oliv. voy. Atlas. tab. 14 et 15!

Quercus Turneri Willd. enum. vol. 2. pag. 975.

Quercus Canariensis Willd. l. c!

HAB. Per provincias Tarraconensem et Bæticam, in totâ Lusitanâ meridionali et in agro Tingitano vulgatissima. β In sylvis inter Carteiam et Asindonem, et in luco opaco circâ oppidum Sancti-Rocci. γ Ad latus occiduum et boreale montis Djibbel Kibir propè Tingidem.

Obs. It has been the fate of this remarkable tree to have been overlooked for more than 200 years after the time of Clusius, and then to have been almost simultaneously rediscovered, and described under a multitude of names by various authors. This too is the more singular as regarding a tree which produces an object of primary importance, namely the gallnuts of commerce. Clusius indeed remarks « galli autem extremis ramulis nascentur, iis quæ in officinis venales reperiuntur, perquam similes; » and in fact when compared with the *quercus infectoria*, both as originally collected by Olivier, and as found by Labillardière in Syria, and by myself and Mr. Parolini in Phrygia, the Spanish plant turns out to be identic with the levant species, whose product is so universally employed. This oak begins to appear both in the eastern and western portion of the old world between the 41 and 42 degrees of northern latitude. It does not seem to pass the Pyrenees in the west, and in the east I found it to the north of Constantinople in the valley of Domoûz Derêh which opens on the Black sea. How much further northwards it mounts in this direction I am unable to say. It descends as far south as Syria, but how far it follows in the west the chain of Mount Atlas cannot be yet ascertained. It is not indigenous in the Canaries, but as well as the chestnut has been introduced by the Spanish colonists.

Like all its congeners this species is exceedingly variable, yet its variations may be followed from the eggshaped subspinous leaves

figured by Cavanilles, to the crenated heartshaped form which I have described as the variety β . This and the variety γ , I long considered as distinct species, the cup however the least changeable organ of this polymorphous genus, and its scales, are similar in all the varieties. On the arid hills of Valencia and Grenada it assumes the form described by Cavanilles, its more normal appearance is that figured by Olivier, whilst in the fertile valleys of Andalusia and at the base the Djibbel Kibir it becomes the β and γ of this catalogue.

QUERCUS HISPANICA. Lamck.

Q. cortice suberoso; ramis subfastigiatis; foliis subperennantibus, lanceolatis, acutis, argutè serrato-dentatis, aut crenatis, crenulis mucronatis, coriaceis, saturatè viridibus, subtùs glauco-tomentosis; cupulis turbinatis, subsessilibus, squamis echinatis, subcrinitis, palulis.

Quercus Hispanica Lamck Encycl. vol. 1. pag. 716.
excl. var. γ . Brot. vol. 2. pag. 34.

Lucombe oak Horlt. Angll.

Quercus crenata Lamck l. c. pag. 717.

Quercus pseudo-Suber Desf. Fl. Atl. vol. 2. pag. 348.

Santi viagg. pag. 156. tab. 4. Spreng. Antiq. Bot. pag. 16. tab. 1.

Quercus ægilopifolia Pers. Syn. vol. 2. pag. 570.

Quercus Exoniensis Loddig. catal.

Quercus Lucombeana Sweet Hort. Brit. pag. 466.

HAB. In Hispaniâ. (Lamck). In Lusitaniæ provinciâ Algarbiâ circa Monchique. (Brot).

OBS. I did not myself meet with this species, but I have thought it right to insert it here in order to give as above its very intricate and little known synonymy. As Desfontaines describes his plant with deciduous leaves, and Santi his as an evergreen, the learned Reichenbach with reasonable doubts is inclined to consider them as distinct, (Fl. exc. vol 1. pag. 177) but this difference depends as in Q. Lusitanica, Q. humilis and other subperennant species, on the greater or less rigour of the climate. Its leaves, its stiffer fastigiate habit, the turbinate form of its cup, and the much shorter bristles of its scales, together with its suberosity, sufficiently distinguish it from Q. Cerris, which like itself has been parcelled out into a multitude of supposed species. I have compared the authentic specimens of Desfontaines with samples cut from the original Lucombe or Exeter oak, and find them identic. The seedlings raised from the parent tree vary considerably, and as it bears fruit very young we may expect to meet with many garden varieties. In fact the leaves of this genus afford characters of form only on a large and general scale, and the quantity and even the quality of their down is a very minor consideration. The most stable characters are those taken from the shape and scales of the cup, and its relative size as to the acorn: yet these sometimes vary, for nothing is so unchangeable in nature as to be

entirely subservient to precise definition. The leaves of this species approach nearer to *Q. Libani* Oliv. (voy. tab. 32) which is the *Q. castaneæfolia* C. A. Meyer (Pl. Cauc., pag. 44) than to *Q. Cerris*, they are however always glabrous in *Q. Libani*, and its large depressed fruit, and the wide rhomboidal scales of the cup retroflexed at the point, are exceedingly distinct, and remarkable. *Q. Hispanica* seems to be found here and there in the warmer parts of the mediterranean region. The Lucombe oak is said to have come from the Levant.

ILICES.

QUERCUS SUBER. Linn.

HAB. In Hispaniâ meridionali ubiquè.

QUERCUS ILEX. Linn.

HAB. Per Hispaniarum provincias australes vulgaris.

QUERCUS BALLOTA. Desf.

β *rotundifolia* Lamck.

HAB. In Hispaniâ Tarragonensi et per omnem Bæticam vulgaris. In Lusitaniâ, et inter Vettones ad Lanciam Transcadanam ubi copiosissima. In Mauritaniâ propè verticem montium Tetuanensium *Djibbel Dersâ* 4-pedalem floridam legi; occurrit etiam circâ Salam Ballotarum ilicetum ingens *Mamára* seu *Mehedia* dictum. Fructus Mauris etiam *Belliott* ut et *Hispanis Bellotas*.

Obs. Clusius confounded this species with the *Ilex*, though the figure of his *Ilex major* (Rar. Pl. Hisp.) evidently belongs to *Ballota*. Lamarck first mentioned a variety of this plant with entire roundish leaves, such as it occurs frequently, under the name of *Q. rotundifolia*. Desfontaines described the species accurately, and the name he gave it is far preferable to that of Lamarck, which refers to a peculiar form of the plant, to which alone it should remain attached. The *Ballota* begins to appear mixed with the other holm oaks between the 41 and 42 degree of north latitude, and continues to increase till in the south it is by far the most common species. It seems to make its appearance in Greece in the same latitude, and is perhaps the tree called *Etymodrys* and *Hemeris* by Theophrastus (1), but its eastern station seems to need further investigation for it is not impossible that the *Hemeris* of Theophrastus may belong to the varieties of *Q. Robur* mentioned as eatable by professor Tenore (Syll., pag 469).

The distinctions between the *Ilex* and *Ballota* are frequently little apparent in isolated specimens, but I observed that the peasants distinguished the trees accurately at a distance, which I was for a

(1) Όιον τὴν τὰς γλυκείας βαλάνους φέρουσαν δι μεν ἡμερίδα καλοῦντες οἵδε ἐτυμόδρυν. Theop., lib 3, cap. 9.

long time unable to do. The leaves of *Ballota* have always a tendency to assume a round rather than an elliptic form, toothed and entire leaves are mingled on the same branch, and the down with which they are cloathed is much thicker and of a different quality, the branches are stiffer, and the fruit besides being sweet is very long and cylindrical. It is of a much less hardy nature than the *Ilex* which becomes a large forest tree when cultivated in England, whilst a *Ballota* which I preserved for near 20 years in a warm exposure had scarcely reached 6 feet during that time.

COCCIFERÆ.

QUERCUS COCCIFERA. Linn.

Q. foliis ovatis, undulatis, echinato-dentatis, basi rotundatis; cupulâ subsessili, pedunculo crasso, squamis spinulosis, spinis laxis, apice subulatis, recurvis; glande elongatâ cylindraceâ.

HAB. In provinciâ Bæticâ, et præsertim Tarragonensi vulgaris.

QUERCUS PSEUDO-COCCIFERA.

Q. foliis elongato-ovatis, planiusculis, nervosissimis, margine spinosis, spinis sursum spectantibus, basi cordatis; cupulâ breviter pedunculatâ, pedunculo crasso, squamis adpressis, margine undulato-revolutis, nervo dorsali eminenti, apice incurvis; glande breviusculâ, conicâ.

Q. pseudo-coccifera Desf. Fl. Atl. pag. 349. Labill. Dec. 5. tab. 6. fig. 2. fructus, excl. fig. 1.

HAB. In montosis Bæticæ, in Lusitanâ circâ Olisiponem, Cintram, *Caldas da Rainha*, et alibi. In monte Tingidis *Djibbel Kibir*.

QUERCUS CALLIPRINOS.

Q. foliis ellipticis, planiusculis, margine spinulosis, spinis ascendentibus; cupulâ breviter pedunculatâ, pedunculo crasso, clavulato, squamis elongatis, laxis, planis, apice subincurvis, ultrâ glandem brevem, globosulam, porrectis.

Q. pseudo-coccifera Labill. Dec. 5. pag. 9. tab. 6. fig. 1. excl. fig. 2. et synon. Desf.

HAB. In montibus *Djibbel Dersâ Tetuanensem*.

Obs. The samples which I refer on account of the form of their leaves, though with some doubt, to the Syrian plant of *Labillardière*, were collected in the mountains of Tetuan. Their leaves are downy on both sides, but the fruit is in a very imperfect state. The description of the *Calliprinos*, which is very distinct from the African species described by Desfontaines under the somewhat barbarously compounded name of *pseudococcifera*, has been framed from the

only specimen of the species which exists in the herbarium of Labillardière, and which served him for the drawing and description in his fifth decad.

BUXUS BALEARICA. Lamck.

HAB. Inter Malacam et oppidulum *Torre de la Mar.*

ARISTOLOCHIA BÆTICA. Willd.

HAB. In agro Tarragonensi, in ruderibus Italicæ, et alibi in Bæticâ vulgaris.

ARISTOLOCHIA GLAUCA. Willd.

HAB. In monte Calpe.

DAPHNE THYMELÆA. Linn.

HAB. Circà *Falcete* in Hispaniâ Tarragonensi.

PASSERINA ARGENTATA. Lamck.

HAB. Circà Malacam et Saguntum.

PASSERINA TINCTORIA. Pourr.

HAB. In collibus agri Tarragonensis et circà Cardonem.

PASSERINA CANESCENS. Schousb.

HAB. In Bæticâ circà Abderam, ad fretum Herculeum, et non longè à Calpe monte et Divi Roccii oppidulo.

POLYGONUM SERRULATUM. La Gasc.

HAB. Ad rívulos circà Malacam.

RUMEX SCUTATUS. Linn.

HAB. Circà Malacam.

RUMEX TINGITANUS. Linn.

HAB. Circà Gades (*Herb. Cabreræ*).

CERATOSPERMUM PAPPOSUM. Pers.

HAB. In montosis inter Eliberim et Portum Magnum.

ANABASIS TAMARISCIFOLIA. Cav.**HAB.** Inter Eliberim et Portum Magnum.**SUÆDA SETIGERA. Moq.****HAB.** Ad Portum Magnum.**SUÆDA MARITIMA. Moq.****HAB.** Ad littora Malacitana.**SUÆDA FRUTICOSA. Forsk.****HAB.** Ad ostia Iberi.**SALSOLA KALI. Linn.***S. rosacea. Cav. non Linn.***HAB.** Ad basin montium Eliberitanorum.**SALSOLA ARTICULATA. Forsk.****HAB.** Circa Portum Magnum, et ad Charidemum promontorium.**SALSOLA OPPOSITIFOLIA. Desf.****HAB.** Ad basin montium Eliberitanorum.**SALSOLA BREVIFOLIA. Desf.****HAB.** Inter Eliberim et Portum Magnum, ad promontorium Charidemum, circà *el Marquesado* (*Hænseler*) et propè Gades (*Herb. Cabrerae*).**SALSOLA GENISTOIDES. Poir.****HAB.** In montibus inter Eliberim et Portum Magnum.**ALTERNANTHERA ACHYRANTHA. R. Br.****HAB.** Gadibus.**PLANTAGO ARGENTEA. Ram.****HAB.** In summâ Alpe *de la Sierra Nevada*.**PLANTAGO SUBULATA. Linn.****HAB.** In Alpibus editioribus *de la Sierra Nevada*.**PLANTAGO BELLARDI. All.****HAB.** Circà Barcinonem.

ARMERIA SPLENDENS.

S. splendens La Gasc. et Rodr. An. Cienc. Nat. vol. 5. pag. 274.

HAB. In rupibus excelsis Alpium Eliberitanarum *de la Sierra Nevada*. Armeriae Alpinæ forsitan varietas.

ARMERIA PLANTAGINEA. Willd.

Statice plantaginea All. Poir. it. vol. 2. pag. 173.

Statice scorzoneræfolia Link in Schrad. Journ. 1800. pag. 146.

Statice pseudo-heimeria Brot. Fl. Lus. vol. 1. pag. 488.

Statice Cephalotes Schousb. Jaggt. Marok. pag. 60.

HAB. Ad Promontorium Magnum.

ARMERIA FASCICULATA.

Statice fasciculata Vent. Hort. Cels. tab. 38.

Statice Cephalotes Link. in Schrad. Journ. pag. 60. non Willd.

Statice pinifolia Brot. Fl. Lus. vol. 1. pag. 486.

HAB. Ad littora freti Herculei, circè Gades, et in arenâ maris propè oppidulum *Ericeira*, in Lusitaniâ.

STATICE AURICULÆFOLIA. Vahl.

HAB. Ad Charidemum promontorium.

STATICE GLOBULARIÆFOLIA. Desf.

HAB. Ad ostia Iberi cum Statice Limonio Linn.

ANAGALLIS LINIFOLIA. Linn.

HAB. In montibus Saguntinis.

ANAGALLIS MONELLI. Linn.

HAB. Circè Gades.

ANAGALLIS COLLINA. Schousb.

HAB. In Lusitaniæ collibus demissioribus circè *Cintra*.

ANAGALLIS CRASSIFOLIA. Thore.

HAB. In arenâ maris ad ostia Durii.

LAVANDULA DENTATA. Linn.

HAB. In monte Jovis propè Dianum, et in rupestribus Malacitanis.

LAVANDULA PINNATIFIDA. Linn.

HAB. Circà Malacam et inter oppidula *Moita* et *Palmella*, in Lusitanìâ.

LAVANDULA SPICA. DC. β lanigera.

HAB. In jugis Eliberitanis, et in plurimis Bæticæ montibus apricis.

OBS. This variety is remarkable for its broad leaves, thickly beset with white downy wool, but it does not otherwise differ from the true Spica.

MENTHA SYLVESTRIS. Linn. var. mollissima.

HAB. Circà Eliberim et in monte *Sierra Tejeda*.

MENTHA ROTUNDIFOLIA. Linn.

HAB. In montibus Arundaë propè *el desierto de las Nieves*, ad *thermas Carratraca*, et alibi in Bæticâ.

MENTHA AQUATICA. Linn.

HAB. In aquosis Bæticæ propè *Torre de la mar*.

SALVIA OFFICINALIS. Linn. var. tenuior Desf. (*Cat. ed. 3.*
pag. 94.)

Sauge de Catalogne Desf. Herb.

HAB. In montibus siccis circà Barcinonem, in monte sancto Tarragonensis, et alibi in provinciâ citeriore.

SALVIA LAVANDULÆFOLIA. Vahl.

δ *Lagascana* foliis lanceolatis, angustis, nervosis, basi in petiolum attenuatis, utrinquè albidis, tomentosis, calycibus glabrescentibus.

β *latifolia* caule lignoso rigido, foliis latis, ovatis, longè petiolatis, utrinquè lanato-tomentosis, candidissimis, calycibus subglutinosis.

HAB. α In multis Bæticæ collibus apricis. β In montibus *Sierra Tejeda* et *Sierra Nevada*.

OBS. Though these two varieties are considerably different in appearance, yet no distinction can be observed in their inflorescence. In a section therefore so variable I have no hesitation in uniting them. These plants seem to pass into *S. officinalis* through the variety *tenuior* of Desfontaines, and will possibly with several others

constitute hereafter a single specific group, the centre of which will be the common sage. According to Mr. Bentham the *S. Hispanorum* of Professor La Gasca is synonymous with this species, but I believe that the narrow leaved variety was more particularly comprehended by this term, as was the case probably with the *S. lavandulæfolia* of Vahl himself.

SALVIA TINGITANA. Ettl.

HAB. Circà Gades.

SALVIA ARGENTEA. Linn.

HAB. In montosis circà Malacam.

SALVIA COMMUTATA. Benth?

HAB. Non procul Arundâ loco dicto *Desierto de las Nieves*.

OBS. My specimens are too far advanced to be noted with certitude, they resemble the *S. odorata* cultivated.

SALVIA VIRIDIS. Linn.

HAB. In montibus *Sierra de Agua*, *Sierra de Alfacar* (*Rambur*), et alibi in Bæticâ calidiore.

NEPETA CATARIA. Linn.

HAB. Circà thermas oppidi *Alhama*.

NEPETA NEPETELLA. Linn.

HAB. In montibus *las Alpujarras*, *Sierra de Gador*, et alibi in Bæticâ.

NEPETA MULTIBRACTEATA. Desf.

HAB. In regione mediâ montis *Sierra Nevada*.

NEPETA ROSEA. Salzm.

HAB. In regione calidâ montis *Sicrra Nevada*.

NEPETA TUBEROSA. Linn.

HAB. Circà Malacam, Eliberim, et in rupibus promontorii Calpes.

NEPETA ACEROSA.

N. caule glabrescente, erecto, ramoso, stricto, 4-sulcato; foliis ovatis, cordatis, irregulariter crenatis; racemo ramoso, elongato, caudato; bracteis plurimis, lanceolatis, aut linearibus, nervosis, molliter ciliatis, in mucronem attenuatis, calyces subæquantibus; calycibus costato-nervosis, dentibus elongatis, ciliatis, acutissimis; corollæ tubo calyce longiore.

N. tuberosa Desf. *Fl. Atl. vol. 2. pag. 10. exll. synn.*

HAB. In Hispaniâ meridionali (*Brouss.*). In agris Algerensi et Tunetano (*Desf.*).

Obs. This species is certainly very distinct from *N. rosea* Salzm. and *N. tuberosa* Linn. its greatest affinity is with *N. multibracteata* Desf. I am however inclined with Desfontaines himself to consider it as distinct. It differs from that species in its general habit, in its long thin spike, in the form of its bracteæ, and in the sharp pointed and almost pungent teeth of its calyx. In the plant collected by Desfontaines the verticillastres are brought together, into a long cylindrical spike, whilst in that of Broussonet, which does not appear to differ otherwise, they are very remote. Its bracteæ, which are not scarious, but have the consistane of leaves, vary as to coloration.

THYMUS ANGUSTIFOLIUS. Pers.

T. cæspititius Hoffm. et Link.

T. serpylloides Bory.

β pubescens.

T. diffusus Salzm.

HAB. In monte Arabrigâ, in monte *Sierra Nevada*, et alibi in Hispaniâ meridionali. β In aridis Bæticæ (Rambur).

THYMUS TOMENTOSUS. Willd.

HAB. In montosis circâ thermas oppiduli Carratraca, in monte Arabrigâ, et alibi in Bæticâ et Lusitaniâ.

THYMUS CEPHALOTUS. Linn.

HAB. In collibus Lucentinis et alibi in Bæticâ.

THYMUS CAPITATUS. Linn.

HAB. Frequens in sterilibus Bæticæ.

THYMUS VILLOSUS. Linn.

HAB. In montibus promontorii Lunæ.

THYMUS HERBA BARONA. Loïs.

HAB. In monte Jovis propè Dianum.

THYMUS ALPINUS. Linn.

HAB. In altioribus montis *Sierra Tejeda*.

SATUREJA MONTANA. Linn.

β obovata La Gasc. vulgò Tomillo real.

Calamintha Hispanica frutescens marisolio Tourn.

Inst. vol. 1. pag. 194.

S. cuneifolia Ten. *Fl. Nap. tab. 151. fig. 2.*

HAB. α In collibus Saguntinis et in totâ provinciâ Tarragonensi, necnon in Bæticâ inter Montium juga de la *Sierra Nevada*. β Circâ Malacam, in promontorio Charidemo, propè Abderam, Lucentum, et in totâ provinciâ Bæticâ calidiore.

Obs. The variety β is so remarkable, that could any constant characters be found, it might be considered as a species. Cultivated it preserves a great part of its distinct appearance.

MICROMERIA NERVOSA. Benth.

HAB. Propè Malacam, *Alcala de los Gazules*, et alibi in Bæticâ.

MICROMERIA GRÆCA. Benth.

HAB. Circà thermas oppiduli *Carratraca*.

CLEONIA LUSITANICA. Linn.

HAB. In collibus siccis Bæticæ.

SIDERITIS SCORDIOIDES. Linn.

β *Boissieri*, foliis villosis, albidis, inferioribus sub-spathulato-linearibus, parcè denticulatis, superioribus integris, linearibus, verticillastris in spicam ovatam aggregatis.

S. glacialis Boiss. *Notice sur l'Ab. Pinsapo.* pag. 12.

HAB. In montibus Bæticæ, *Sierra Tejeda* et *Sierra Nevada*.

Obs. This plant, though so different in appearance from many of the varieties of *S. scordioides*, approaches so near to *S. Alpina* and *Pyrenaica*, that it is impossible to separate them; it is indeed just such a variation of these reduced forms of the species as one might expect to meet with on hotter and more arid mountains. As it is found far lower down on the Tejeda chain, the epithet *glacialis* is scarcely appropriate, and as it merits distinction, it cannot be better signalized than by the name of the author who first called it into notice.

SIDERITIS MONTANA. Linn.

HAB. In umbrosis humidis circà Malacam.

SIDERITIS LEUCANTHA. Cav.

HAB. In rupibus circà Malacam, *Carthaginem novam* (*Gaudichaud*). In saxosis maritimis agri *Lucentini*, et alibi in Bæticâ. Variat foliis canis et virescentibus.

SIDERITIS INCANA. Cav.

S. virgata Desf.

S. sericea Pers.

HAB. Circà Malacam. Variat foliis calycibusque tomentosis aut sericeo-candidissimis, spicâ virgatâ, quadrangulari, angulis acutis. *Lavandulam* Spicam assimilare rectè refert Benthamus.

SIDERITIS FOETENS. La Gasc.

HAB. In rupestribus circà Abderam, et in promontorio Chari-demo. Descriptio Lagascana optima.

BALLOTA HIRSUTA. Benth.

HAB. In ruderibus Sagunti, et in rupibus montis Jovis propè Dianum.

Obs. The limb of the calyx is considerably more dilated than in the common form of *Ballota Hispanica*, but I doubt whether it should be held as a good species.

PHLOMIS CRINITA. Cav.

HAB. In montibus *Sierra Tejeda*, *Sierra Nevada* et *las Alpu-jarras*.

TEUCRIUM CHAMÆDRYS. Linn.

T. regium Schreb.

β *myrtifolium* foliis subtùs albido-tomentosis.

T. myrtifolium Poir.

γ *angustifolium* foliis angustis margine revolutis.

HAB. γ In collibus Bæticis vulgaris.

Obs. From original specimens in the herbarium of Desfontaines it is evident that the *Teucrium myrtifolium* Poir. differs merely as a hoary variety from *T. Chamaedrys*. This is evidently its nearest affinity and not *T. Marum*. It is likewise very distinct from *T. brevifolium* Willd. The Spanish plant evidently approaches that of Poiret, and is probably its wild type.

TEUCRIUM BUXIFOLIUM. Schreb.

HAB. In collibus siccis vulgaris.

TEUCRIUM POLIUM. Linn.

HAB. Per ambas provincias Tarragonensem et Bæticam, innumeræ hujus speciei varietates reperiuntur.

TEUCRIUM CUNEIFOLIUM. Sibth. et Smith?

HAB. In monte *Sierra Tejeda*.

TEUCRIUM PSEUDO-CHAMÆPITHYS. Linn.

HAB. In Bæticâ vulgaris.

TEUCRIUM SCORDIOIDES. Schreb.

HAB. Circà Malacam.

TEUCRIUM SPINOSUM. Linn.

HAB. Copiosè in campis inter Abderam et Eliberim.

OROBANCHE FOETIDA. Desf.

HAB. In leguminosarum præsertim ononidum arenæ maritimæ radicibus in Bæticâ calidiore.

PHELYPÆA LUTEA. Desf.

HAB. In insulâ Divi Ferdinandi propè Gades.

PEDICULARIS SYLVATICA. Linn.

P. Lusitanica Hoffm. et Link Fl. Port. tab. 61.

P. sylvatica var. *major*. Brot. Fl. Lus. vol. 1. pag. 188.

HAB. In montosis promontorii Magni Lusitaniæ.

PEDICULARIS CÆSPITOSA.

R. caule à basi florifero; calyce subintegro, aut dentato dentibus parvis; corollæ labio superiore breviter rostrato, rostro truncato utrinquè mutico.

HAB. In pratis Alpinis ad fontes frigidos vallis Divi Johannis (*Barranco de San Juan*), ad basin summi montis Eliberitani *el Picacho de la Veleta*.

OBS. This species approaches the preceding, but appears to be very sufficiently distinct by its calyx and untoothed corolla. Whilst the most Alpine varieties that I have examined of *P. sylvatica* have a small tooth on each side of the upper lip of the corolla beneath the point of the rostrum which is always wanting in the present species.

TRIXAGO LATIFOLIA. Reichb.

HAB. Propè Olisiponem in pinetis trans Tagum.

ODONTITES RUBRA. Pers.

HAB. In arvis lutosis veteris regum Arabum paradisi *Soto de Roma* in planicie Eliberitanæ.

ODONTITES VISCOSA. Lamck.

HAB. In montosis siccis Bæticæ.

ODONTITES LONGIFLORA.

Euphrasia longiflora Vahl.

HAB. In regione mediâ montium Bæticorum *Sierra Tejeda* et *Sierra Nevada*.

EUPHRASIA OFFICINALIS. Linn.

HAB. In editioribus montis *Sierra Nevada*.

SCROFULARIA TRIFOLIATA. Linn.

HAB. Circà thermas oppiduli *Carrastraca*:

SCROFULARIA BETONICÆFOLIA. Linn.?

HAB. In montosis Arundæ *al desierto de las Nieves*.

SCROFULARIA SAMBUCIFOLIA. Linn.

S. mellifera Vahl.

HAB. In Bæticâ circà Gades, et ad fretum Herculeum propè oppidulum Sancti Roccii (*Rambur*).

SCROFULARIA RAMOSISSIMA. Lois.

S. frutescens Brot.

HAB. In Lusitaniâ propè Cetobrigam, et in Bæticâ circà Gades.

SCROFULARIA AQUATICA. Linn.

HAB. In aquosis propè Saguntum.

DIGITALIS PURPUREA. Linn.

α minor foliis albidis pubescentibus caule paucifloro.

β tomentosa caule elato foliis latè ovato-lanceolatis subtùs albo-tomentosis.

D. tomentosa Hoffm. et Link *Fl. Port. vol. 1. pag. 221.*
tab. 29.

D. purpurea tomentosa Brot. *Phys. Lus. vol. 2. pag. 159. tab. 149.*

HAB. α In montium jugis *de la Sierra Nevada*. β In montibus promontorii Magni Lusitaniæ.

DIGITALIS OBSCURA. Linn.

HAB. Per totam Hispaniam australē ab oppido Dertosâ et Iberi ripis ad Bæticæ ulterioris montes. In nosocomiis pro *D. purpureo* usus est *D. Professor* de Bahi duplicatis dosibus, potestas enim eadem sed vis debilior.

DIGITALIS LACINIATA. Lindl. (*Bot. Reg. tab. 1201.*)

HAB. In rupibus montis Caprai circà thermas oppiduli *Carrastraca*, et in montibus Arundæ, loco dicto *Desierto de las Nieves*.

ANTIRRHINUM HISPANICUM. Chav.

HAB. In nuris vetustis palatii regum Maurorum *el Alhambra*,

LINARIA VILLOSA. DC.

β oppositiflora caule ascende, foliis ovatis parciùs villosis.

L. oppositiflora Poir!

HAB. α In monte Calpe, β in rupibus circà Malacam.

LINARIA ORGANIFOLIA. DC.

γ crassifolia Chav.

HAB. In montibus circà Tarraconem, et in rupestribus montis *Sierra Nevada*, et alibi in Bæticâ. γ In muris oppidi *Cesenna* in Lusitaniâ.

LINARIA HIRTA. Mœnch.

HAB. Inter segetes agri Saguntini, et propè Malacam.

LINARIA TRIPHYLLA. Mill.

HAB. In agro Tarraconensi.

LINARIA TRIORNITHOPHORA. Willd.

HAB. In sylvis ad basin montis Juressi in Lusitaniâ.

LINARIA LATIFOLIA. Desf.

HAB. In arvis Bæticæ vulgaris.

LINARIA VERSICOLOR. Mœnch.

HAB. In montosis Bæticæ.

LINARIA MICRANTHA. Spreng.

HAB. In agro Tarraconensi.

LINARIA BROUSSONETII. Chav.

HAB. In collibus *de Alcantara* et alibi circà Olisiponem.

LINARIA PEDUNCULATA. Spreng.

HAB. In arenâ maris propè Olisiponem et circà Malacam.

LINARIA RETICULATA. Desf.

L. Clementei Hænseler *Ensayo para analisis de las Aguas de Carratraca!*

HAB. In montibus circà thermas oppiduli Carratracæ.

LINARIA TRISTIS. Mill.

HAB. In rupestribus montis Arabrigæ.

LINARIA GLAUCA var. multicaulis. Chav.

HAB. Ad muros et saxa in Lusitaniâ mediâ.

LINARIA SPARTEA. Hoffm. et Link.**HAB.** In Hispaniâ meridionali vulgaris.**LINARIA BIPARTITA.** Willd.**HAB.** Circâ Gades.**LINARIA ALPINA.** DC.**HAB.** In montibus *Sierra Tejeda* et *Sierra Nevada*.**LINARIA SUPINA.** Desf. β *Pyrenaica*.**HAB.** In Hispaniâ Tarragonensi. β In montibus Elieritanis *la Sierra Nevada*.**LINARIA SAXATILIS.** Hoffm. et Link.**HAB.** Circâ Cetrobigam. In monte *Sierra de Alfacar* (*Rambur*).**LINARIA MARGINATA.** Desf.**HAB.** Circâ Malacam (*Rambur*).

DATURA FEROX. Linn.**HAB.** Circâ Abderam, Portum Magnum, et ad Promontorium Charidemum.**ATROPA FRUTESCENS.** Linn.**HAB.** Circâ Malacam, et ad oppidum *Velez Malaga*.**PHYSALIS SOMNIFERA.** Linn.**HAB.** In Bæticâ maritimâ vulgaris.**MANDRAGORA OFFICINARUM.** Linn.**HAB.** Circâ Gades, et in totâ Bæticâ vulgaris.**TRIGUERA AMBROSIACA.** Cav.**HAB.** Circâ Malacam, in campis Hispalensibus, et ad rudera Italicæ copiosa.**SOLANUM SODOMÆUM.** Linn.**HAB.** Ad littora Valentina et in totâ Bæticâ maritimâ.

ECHIUM ALBICANS. La Gasc. et Rodrig.**HAB.** In regione mediâ montis *Sierra Nevada*.**MYOSOTIS SPARSIFLORA.** Mik.**HAB.** In vineis oppiduli *Colares* circâ Olisiponem.

CHLORA SESSILIFOLIA. Desv.**HAB.** In arenâ maris ad ostia fluminis Iberi.**ETYTHRÆA CENTAURIUM.** Pers.**HAB.** Per totam Bæticam ubi formâ summoperè variabili ludit.**ERITHRÆA LINARIÆFOLIA.** Pers. β pauciflora *Schmid Linnæa. vol. 7. 1832. fig. 7 et 9.* γ cymosa floribus in cymam regularem digestis, tubo corollæ elongato.**HAB.** α Ad ostia Iberi, ad littora arenosa lacûs Valentini, et in plurimis Bæticæ locis arenosis. β In monte *Sierra Tejeda*. γ In collibus Saguntinis.**GENTIANA ACAULIS.** Linn. β alpina.**HAB.** In summis Alpibus Eliberitanis *de la Sierra Nevada*.**GENTIANA PNEUMONANTHE.** Linn. var. Boryana.*Gentiana Boryi Boiss. Not. sur l'Ab. Pinsapo. pag. 12.***HAB.** In pratis uliginosis vallis Divi Johannis, seu *Barranco de San Juan*, ad radices summæ Alpis Eliberitanæ *el Picacho de la Veleta*.

OBS. This is a dwarf cespitose variety of *G. Pneumonanthe*. The flower and fruit differ in no way from the original species. An approach to this form is often found in marshy and boggy places in other parts of Europe, and I have specimens exactly like it gathered by Dr. Mentagne between S. Sebastian and Passages.

CYNANCHUM ACUTUM. Linn.**HAB.** Ad Mænobam, et in montibus *las Alpujarras*.

STAPELIA EUROPEA. Guss. (*Suppl. 1. pag. 64.*)*S. Gussoneana Lindl. Bot. Reg. tab. 1731.***HAB.** Ad salinas in campo solibus cocto propè Portum Magnum.

Inveni etiam promontorii Charidemi ferè ex adverso in Tribus Insulis, ubi Mauretaniam Tingitanam à Cæsariensi, quæ nunc Gallica, Malua amnis disternat. Anno 1826 primus vidi et nomine *S. Europæa* docti Gussonei animum præsa-
giens, in schedis jam tūm signavi; etiam antehac nasci in Hispaniis stirpem stapelioideam audivisse asserit, sed non-
dūm vidit La Gasca.

RHODODENDRON PONTICUM. Linn.

HAB. In sylvis umbrosis montium freto Herculeo impenden-
tium, ad rivulorum alpestrium margines, arbustum opa-
cum, 12-pedale. Legi inter oppida *Algesiras* et *Asindon-*
em.

OBS. This species originally discovered by Tournefort in Pontus, was found likewise by Labillardière in Syria near Seye. I have not had occasion to compare the Spanish specimens with those of the original locality, but they are certainly identic with the Syrian plant. Thus it appears that under the same latitude the plants of the Eastern extremity of the Mediterranean are reproduced in the west. The cedar of Lebanon reappearing on the mountains of El Rif in Morocco, and the oak of the East which produces the gallnut covering the hills of Spain, are other not less striking examples, whilst the subtropical species which vegetate in Arabia between the 25^{th.} and 30^{th.} degrees of north latitude are found again in the Canaries.

CAMPANULA DICHOTOMA. Linn.

HAB. In monte Jovis propè Dianum.

CAMPANULA ERINOIDES. Linn.

HAB. In rupibus montium Lucentinorum Benifelim, in monte Calpe, et alibi in Bæticâ.

OBS. The *C. Loeflingei*, so abundant in Portugal, differs from this species merely by its ontspread calyx with toothed laciniæ, I see no distinction in the leaves except that they are hairy. In Brotero's figure (*Phyt. Lus. tab. 18.*) the teeth of the calyx are exaggerated. It remains to be seen whether cultivation would not reduce the two plants to a common type.

CAMPANULA PATULA. Linn.**HAB.** In monte *Sierra Nevada*.**CAMPANULA MOLLIS.** Linn.**HAB.** In rupibus montis Calpes, circà oppidulum Carratraca, et in jugis montium *de la Sierra Tejeda*.**JASIONE CORYMBOSA.** Poir.**HAB.** In monte *Sierra de Agua*.**JASIONE AMETHYSTINA.** La Gasc. et Rodrig. An. Cienc. Nat. vol. 5. n. 15. pag. 271. 1802.*J. humilis.* Lois. *Not. sur les pl. de Fr.* pag. 42. 1810.*J. tristis.* Bory. *Ann. Gén.* vol. 3. pag. 10.**HAB.** In cacumine Alpium Eliberitanarum *de la Sierra Nevada*.**JASIONE FOLIOSA.** Cav.**HAB.** In altioribus montis *Sierra Tejeda*.

SONCHUS SPINOSUS. DC.**HAB.** In petrosis aridis circà Abderam et Portum Magnum.**MICRORHYNCHUS NUDICAULIS.** Less.*Prenanthes asplenifolia.* Willd. ex specimine Herb. Fontanesiani.*Sonchus divaricatus.* Desf. !*Prenanthes patens.* Wall. !*Prenanthes dichotoma.* Wall. !**HAB.** In rupibus maritimis propè Lucentum.

OBS. I can see no difference between the two plants sent from India by Dr Wallich and the Egyptian, Canarian, and Spanish samples, and the species is so variable that I am doubtful whether any permanent varieties can be signalised. The neighbourhood of Alicant is I beleive the northernmost station of this widely extended plant.

ÆTHEORHIZA BULBOSA. Cass.**HAB.** Propè Olisiponem in arenâ mobili lacûs *Albufeira* in litore Transtagano.**ZOLLIKOFERIA PUMILA.** DC.**HAB.** In rupe *Peña de Jijona*, et alibi in Bæticâ.

BARKHAUSIA ALBIDA. Cass.

HAB. In montibus *Sierra Tejeda et Sierra Nevada.*

CREPIS OPORINOIDES. Boiss.

HAB. In summis Alpibus *de la Sierra Nevada.*

ANDRYALA AGARDHII. Hæns.

HAB. In summo monte *la Sierra Tejeda.*

ANDRYALA MACROCEPHALA. Boiss.

HAB. In monte *Sierra de Agua.*

ANDRYALA RAGUSINA. Linn.

HAB. In Hispaniâ meridionali cum *A. integrifoliâ.* Linn. vulgaris, sæpè ob siccitatem aphylla, paniculâ, rigidâ, parviflorâ.

PODOSPERMUM LACINIATUM. DC.

HAB. In Bæticâ vulgare.

PODOSPERMUM CALCITRAPIFOLIUM. DC.

HAB. Cum priore.

SCORZONERA HISPANICA. Linn.

HAB. Cum antecedentibus.

THRINCIA TUBEROSA. DC.

HAB. In uliginosis propè Gades.

THRINCIA MAURETANICA. Spreng.

HAB. Circâ Malacam, in monte *Sierra de Agua*, et propè Olisiponem.

LEONTODON CRISPUS. Vill.

β. Boryanus.

Parvulus, involuero glabriusculo, aut dorso parcus hispidulo, achæniis muricato-puncticulatis.

L. Boryi Boiss. *in DC. Prod. vol. 7. pars 1. pag. 103.*

HAB. In summis Alpibus Eliberitanis *de la Sierra Nevada.*

OBS. This elegant plant cannot be distinguished specifically from its larger prototype. The puncticulation of the achænia are perfectly visible when magnified, and the leaflets of the calyx though generally smooth have sometimes the midrib hairy. After this there remains no other difference but the incisions of the leaves, and its pygmy Alpine form.

CATANANCHE CÆRULEA. Linn.**HAB.** In monte *Sierra Nevada*.**CATANANCHE LUTEA. Linn.****HAB.** In Bæticâ circâ Malacam.**CYANUS MONTANUS.***Centaurea montana. Linn.**Centaurea lingulata. La Gasc.***HAB.** In montibus circâ oppidulum Carratraca, et alibi in Bæticâ.**LEPTERANTHUS LINIFOLIUS.***Centaurea linifolia. Vahl.***HAB.** Circâ Tarragonem.**ACROLOPHUS RAGUSINUS.***Centaurea Ragusina. Linn.***HAB.** In montibus Lucentinis circâ villam Marchionis de Beniel.**ACROCENTRON ORNATUM.***Centaurea ornata. Willd.***HAB.** In monte *Sierra Nevada*.**ACROCENTRON COLLINUM. Cass.****HAB.** In montibus *Alpujarras*.**ACROCENTRON BOISSIERI.***Centaurea Boissieri. DC.***HAB.** In summo monte *la Sierra Tejeda*.**ACROCENTRON GRANATENSE.***Centaurea granatensis. Boiss.***HAB.** In monte *Sierra Nevada*, et in monte *Sierra de Alfacar*.
(*Rambur.*)**CNICUS BENEDICTUS. Linn.****HAB.** In collibus regionis mediæ montis *Sierra Nevada*.**TRIPOCENTRON APULUM. Cass.****HAB.** In pineto *Merita* circâ *Alcoy*, et alibi in Bæticâ.

TRIPLOCENTRON SULPHUREUM.

Centaurea sulphurea. Willd.

HAB. In montosis siccis circà Malacam.

SERIDIA MICROCEPHALA. Cass.

HAB. Circà Dertosam.

SERIDIA SPHÆROCEPHALA.

Centaurea sphærocephala. Desf.

HAB. Propè Olisiponem in arenis trans Tagum flumen.

SERIDIA SONCHIFOLIA. Cass.

HAB. In Bæticâ circà Malacam, et in agro Lucentino.

SERIDIA ASPERA.

Centaurea aspera. Linn.

HAB. In arvis Bæticæ.

MICROLONCHUS SALMANTICUS. DC.

HAB. In locis siccis et in arvis Bæticæ vulgaris.

CYANOPSIS RADIATISSIMA. Cass.

HAB. Circà Malacam.

CHRYSEIS CALVA. Cass.

HAB. In agro Lucentino circà villam comitis de Casas Roxas, ex horto vicino sine dubio erratica.

CENTROPHYLLUM ARBORESCENS. Hook.

HAB. In monte Calpe, et in rupestribus circà Malacam.

CARDUNCELLUS MONSPELIENSIS. DC.

HAB. Ad radices montium de la Sierra Nevada.

CARDUNCELLUS CÆRULEUS. DC.

HAB. Circà oppida Malacam, Ibi, Algesiras et alibi in Bæticâ.

CARDUNCELLUS DIANIUS.

C. caule ramoso, elato (3-pedali et ultrà) : foliis inferioribus elongatis, petiolatis, petiolis basi dilatatis, lacinato-pinnatifidis, lobis linearilanceolatis, inciso-dentatis, apiculatis; involucri squamis omnibus lanceolatis, conformibus, ciliatis, inferioribus 3-3-nerviis, superioribus 42-nerviis, summis scariosis ; pappo subpaleaceo, colorato.

HAB. In rupestribus altioribus montis Jovis propè Dianium, ubi mense quintili anni 1826 cùm jam defloruit, seminibus diù maturatis, fructiferam detexi.

Obs. This species appears to me to be altogether different from any of the varieties which I have seen of *Carduncellus cœruleus*, and more particularly so from *C. multifidus*, Desf. united to it by Professor de Candolle.

JURINEA HUMILIS. DC.

Jurinea Bocconi. Gay in *Endress. Pl. exsicc. Pyren.*

HAB. In montibus *las Alpujarras* et in monte *Sierra Nevada*. Variat foliis et involuero plus minus tomentosis.

KLASEA CICHORACEA.

Carduus cichoraceus. Cyrill.

Centaurea mucronata. Desf.

HAB. In montibus circâ Malacam.

KLASEA PINNATIFIDA.

HAB. In monte *Sierra de Agua*.

ONOPORDON ACAULE. Linn.

HAB. In cacumine montis *Sierra Tejeda*.

LAMYRA HISPANICA.

Carduus Hispanicus. Lamck. *La Gasc.*

Lamyra undulata. Cass.

HAB. In montosis altis inter planitem pingueum urbis *Velez Malaga*, et thermas oppidi *Athama*.

CYNARA ALBA. Boiss.

Cynara lamyroides. Nob. *Mss.*

C. caule elato, paniculato, multicipite, paniculâ dichotomâ; foliis subtûs nervosissimis, inferioribus petiolatis, sinuato-lobatis, superioribus linear-lanceolatis, spinosis, sessilibus; involueri squamis basi dilatatis, reflexis, apice in spinam elongatam attenuatis.

HAB. Cum priore inter oppida *Velez Malaga* et *Athama*.

Obs. The leaves of this species resemble those of *Notobasis syriaca*, its involucre that of *Onopordon gracum*, but its merely fimbriated receptacle places it in the genus *Cynara*, whereas the genus *Lamyra* to which it approaches by the characters of its growth, and the scales of its involucre, has its receptacle garnished with fine silky hairs as long as the flowrets. The scales of its involucre differ only from *Lamyra Hispanica* in having a broader base.

ECHINOPS STRIGOSUS. Lamck.

HAB. In Bæticâ vulgaris.

CALENDULA ARVENSIS. Linn.

C. suffruticosa.

C. suffruticosa. Vahl.

HAB. Propè Barcinonem et Tarraconem, circà Hispalim et in totâ Bæticâ. β In lapidicinis Olisiponensibus, forma fortuita nec vera varietas.

CALENDULA STELLATA. Cav.

C. Ægyptiaca. Desf!

C. marginata. Willd!

C. maritima. Guss!

C. Asterias Fisch. et C. A. Mey!

HAB. In Bæticâ vulgaris.

Obs. The Achænia seem to be the only organs which allow us to seize on specific characters in this genus, these too vary, but all the rest are either entirely alike, or still more unstable. Other forms will probably be hereafter united to this species, but I have not had an opportunity of ascertaining their identity.

CALENDULA INCANA. Willd.

HAB. In rupibus maritimis freti Herculei propè Bælonem et promontorium Junonis.

Obs. This species, like the two preceding, is in certain localities perennant, from 2 to 3 or 4 years. The only difference I can find between it and *C. stellata* consists in its having the outer achænia little or scarcely at all muricated, and its hoary tomentum, which however does not resist cultivation. I gathered at Velez Malaga a form which seems to unite them.

AMBROSIA MARITIMA. Linn.

HAB. Circà Gades.

ARTEMISIA VALENTINA. Lamck. et Del.

A. ramosa. Chr. Smith!

A. Barrelieri. Bess!

HAB. In siccis incultis Hispaniæ Bæticæ communis. Legi etiam in Tribus Insulis juxtâ Maluam flumen in Africâ, et circâ Portum Magnum Mauretaniæ. Habui quoque à Carthagine Novâ à Cl. Gaudichaud lectam.

ARTEMISIA HISPANICA. Lamek.

A. reptans. Chr. Smith!

A. pyromacha. Viv.

HAB. Per totam Bæticam calidiorem vulgaris.

Obs. This plant is frequently punctured by an insect and then produces a pellet of down much used for tinder throughout Andalusia. I have specimens which coincide so exactly with the figure and

description of Professor Viviani, that I doubt not of its identity with his *A. pyromacha*.

ARTEMISIA VARIABILIS. Ten.

HAB. Ad thermas agri Lucentini, et oppidi *Alhama*, neenon in montibus *las Alpujarras*, et alibi in Bæticâ.

ARTEMISIA GLUTINOSA. Gay.

HAB. Circâ Eliberim, et alibi in Bæticâ,

ARTEMISIA ABSYNTHIUM. Linn.

HAB. In regione mediâ montis *Sierra Nevada*.

ARTEMISIA CAMPHORATA. Vill.

HAB. In rupibus excelsis Alpium Eliberitanarum ad basin summi montis *el Picacho de la Veleta*.

ARTEMISIA CRITHMIFOLIA. Linn.

HAB. In maritimis Bæticis vulgaris.

ARTEMISIA GRANATENSIS. Boiss.

A. basilica. Nob. in litt.

HAB. Ad glaciem et nives præalti montis *Sierra Nevada*, ubi sub nomine matricariae regiae (*Hisp. Manzanilla real*) celeber. Apud omnes Bæticos ob potestates ejus medicamentosas pervulgata est herba sicca.

OBS. This plant approaches very nearly to *A. Bocconi* All. *A. eriantha* Ten. and other varieties of *A. spicata* which differ in habit from the normal form. The achænia however are constantly glabrous which does not appear to be the case with the above plants.

TANACETUM ANNUUM. Linn.

HAB. In Bæticâ vulgare.

PYRETHRUM GLABRUM. La Gasc.

HAB. In montosis circâ Malacam.

PYRETHRUM CORYMBOSUM. Willd.

HAB. In rupibus montis Jovis propè Dianum.

PYRETHRUM RADICANS. Cav.

HAB. In cacumine montis *Sierra Nevada*.

LEUCANTHEMUM MONTANUM. DC.

HAB. In rupestribus agrorum Lucentini et Malacitani.

COTULA CORONOPIFOLIA. Linn.

HAB. Circâ Gades (*Cabrera Herb.*)

LYONNETIA ABROTANIFOLIA. Less.

HAB. Circà Malacam, et in sinu Gaditano propè portum Sanctæ-Mariæ.

SANTOLINA CHAMÆCYPARISSIAS. Linn.

HAB. In Hispaniâ Tarraconensi sub formis plurimis copiosissima, et in monte Bæticæ *Sierra Nevada*.

SAUTOLINA ROSMARINIFOLIA. Mill.

S. canescens. La Gasc.!

$\beta.$ *leptocephala.*

Capitulis attenuatis, ovato-cylindraceis.

HAB. Circà *Alhama* et alibi in Bæticâ, $\beta.$ in monte *Sierra Tjeda*, invenit etiam in monte *Sierra Nevada* Cl. Rambur. An *S. elegans* Boiss.?

ANTHEMIS AUREA. DC.

HAB. In collibus ad promontorium Magnum Lusitaniæ.

OBS. The only modern figure of this plant *Brot. Phyt. Lus. tom. 2. tab. 163.* is exceedingly defective. Professor DC justly remarks its near affinity to *A. nobilis*. It remains however even when cultivated *anacyclous*.

MARUTA FOETIDA. Cass.

HAB. Circà Eliberim ubi vulgò *Matagata*, et alibi vulgatissima.

PERIDERÆA. G. N.

Involucrum discoideum, imbricatum. *Flosculi* radii ligulati, neutri, disci 5-dentati, superiores steriles. *Receptaculum* conicum, foveolatum, paleaceum, paleis ad basin latis, fusco-marginatis, tubo corollæ æqualibus, persistentibus, superioribus brevibus, scariosis, caducis. *Stylus* disci ramis exappendiculatis. *Achænum* exalatum, subquadrangulare, glabrum, striatum, calvum, areolâ terminali indistinctâ. *Herba* littorum maris interni, annua, inodora, glabra, præcox, facie Chamæmeli. *Rami* foliosi, apice moncephali. *Radius* albus, repandus. *Folia* bipinnatifida, lobis incisis. *Discus* fructu maturo supernè nadus, basi collari seu $\pi\epsilon\rho\iota\delta\epsilon\rho\alpha\iota\omega$ palcarum persistentium cinctus.

PERIDERÆA FUSCATA.

*Anthemis fuscata. Brot.***HAB.** Per totam Bæticam et Lusitaniam calidorem frequens.

OBS. This plant certainly approaches very nearly to *Maruta* to which it has been attached by Professor de Candolle. Should it continue to form a part of that genus it will constitute an independent section. Its differences consist in the nature, the caducity of the upper, and the persistency of the lower paleæ of the receptacle, in the achænia which are subtetragnathæ and striated, as in many species of *Chamæmelum*, and not tuberculated and ribbed as in *Maruta*. The terminal areola is nearly obliterated. The involucre is imbricated, and the rays of the corolla not reflexed. I met with a curious monstrosity of this plant in Portugal, in which the inflorescence by prolongation had become umbelliform.

CLADANTHUS PROLIFERUS. DC.

HAB. In Bæticâ calidore vulgaris.

ANACYCLUS TOMENTOSUS. DC.

HAB. In maritimis Bæticæ.

ANTHEMIS NOBILIS. Linn.

*A. microphylla. Willd.***HAB.** In summo monte *Sierra Tejeda*. Planta Hispanica ab A. nobili Pyrenaico nullo modo differt.

HOMALOTHECA (1) SUPINA. Cass.

HAB. In Alpibus Eliberitanis, seu *de la Sierra Nevada*.

HELICHRYSUM ANGUSTIFOLIUM. DC.

HAB. In Bæticâ cum H. Stœchade.

MICROPUS BOMBYCINUS. La Gasc.

HAB. Circâ Malacam cum M. supino.

INULA SQUARROSA. Linn.

HAB. In Lusitanâ circâ oppidum Cintra.

SOLIDAGO VIRGAUREA. Linn.

HAB. In altioribus montis *Sierra Tejeda* circâ fontem *la Tasilla de Plata*, et in monte *Sierra Nevada*.

(1) Scripserunt Græci ὅμαλος nec ὅμαλος, homalotheca ergo latinè scribenda.

TRIPOLIUM VULGARE. Nees. ab. Esenb.

HAB. In Hispaniâ Tarragonensi in locis salsis circâ oppidum *Divi Caroli*.

BELLIS SYLVESTRIS. Cyrill.

Doronicum Bellidiastrum. Clem. *Ensayo de la Vid.*
pag. 293.

HAB. In Bæticâ cum B. annuâ et perenni vulgaris.

PULICARIA ODORA. Reichb.

Inula dumetorum. Salzm. *exsicc. Ting!*

HAB. In dumetis montis *Sierra de Agua*, et alibi in Bæticâ.

INULA CRITHMOIDES. Linn.

HAB. In totâ Bæticâ maritimâ vulgaris.

JASONIA SICULA. DC.

HAB. Ad rivulos et in umbrosis circâ promontorium *Charidemum*.

JASONIA GLUTINOSA. DC.

HAB. Circâ Malacam, Eliberim, in monte *Sierra Elvira*, et alibi in Bæticâ.

JASONIA TUBEROSA. DC.

HAB. In demissioribus montis *Sierra Nevada*.

SENECIO LINIFOLIUS. Linn.

HAB. In rupibus maritimis Bæticæ vulgaris.

SENECIO DORIA. Linn.

HAB. Ad basin montis *Sierra Nevada*, circâ oppidum *Tibi*, et ad salinas *Lamalá*.

SENECIO TOUNEFORTHII. Lap.

HAB. In monte *Sierra Nevada*.

SENECIO MINUTUS. DC.

HAB. In umbrosis propè Eliberim.

SENECIO ERUCÆFOLIUS. Linn.

HAB. Ad margines agrorum circâ villam regum *Maurorum el Soto de Roma*, et in Lusitaniae montibus *Promontorii Magni*.

SENECIO JACOBÆUS. Linn.

HAB. Ad thermas oppidi *Carratraca*, circâ Malacam, et alibi in Bæticâ.

SENECIO VISCOSUS. Linn.

HAB. In humidiusculis regionis mediæ montis *Sierra Nevada*.

SENECIO SQUALLIDUS. Linn.

HAB. In agro Tarragonensi, et propè Olisiponem in arenis trans Tagum flumen.

SENECIO BOISSIERI. DC.

HAB. In altioribus montis *Sierra Nevada* (Rambur).

CEPHALARIA LEUCANTHA. Schrad.

HAB. In montosis circâ thermas oppiduli *Carratraca*.

SUCCISA SAXATILIS.

Scabiosa saxatilis. Cav.

HAB. In rupibus excelsis montis Jovis propè Dianum.

ASTEROCEPHALUS COLUMBARIA. Spreng.

HAB. Plurr. varr. per provincias Bæticam, et Tarragonensem, et in Lusitaniâ.

ASTEROCEPHALUS HOLOSERICEUS. Spreng.

HAB. Inter montes propè Arundam, loco dicto *Desierto de las Nieves*, et in editioribus montis *Sierra Tejeda*. Legit etiam in monte *Anticariæ* cl. Rambur. Præcedentis non nisi varietas insignis.

ASTEROCEPHALUS STELLATUS. Spreng.

HAB. In locis siccis Bæticæ vulgaris.

ASTEROCEPHALUS MARITIMUS. Spreng.

HAB. In collibus Olisiponensibus.

SCABIOSA SYLVATICA. Linn.

HAB. In montibus Lucentinis.

PTEROCEPHALUS SPATHULATUS. Coult.*Knautia spathulata. La Gasc.!***HAB.** In rupibus altis montis *Sierra Tejeda*, et in monte *Sierra de Alfacar* ex Cl. Rambur.**FEDIA CORNUCOPIÆ.** DC.**HAB.** In Bæticâ vulgaris.**VALERIANELLA PLATYLOBA.** Duf.**HAB.** Circâ Olisiponem.**VALERIANA TUBEROSA.** Linn.**HAB.** In monte Arabrigâ, et alibi ad sinistram Tagi ripam propè Olisiponem.**PUTORIA CALABRICA.** Pers.**HAB.** In rupibus siccis propè oppidulum *Carratraca*, et ad basin montis *Sierra Nevada*, ubi à Cl. Rambur lecta fuit.**VALANTIA HISPIDA.** Linn.**HAB.** In Bæticâ vulgaris.**GALIUM PUSILLUM.** Linn.**HAB.** Ad basin montis *Sierra Nevada*.**GALIUM SACCHARATUM.** All.**HAB.** In omni Bæticâ copiosa.**SAMBUCUS NIGRA.** Linn.**HAB.** In mediâ regione montis *Sierra Nevada*.**LONICERA ETRUSCA.** Sant.**HAB.** Ad basin montis *Sierra Nevada*, et alibi in Bæticâ.**LONICERA IMPLEXA.** Hort. Kew.**HAB.** Circâ oppida Barcinonem, *Reuss*, et alibi in Hispaniâ Tarragonensi.

LONICERA PERICLYMENUM. Linn.

HAB. Circà oppidum *Velez Malaga*. Tota planta valde pubes-
cit, sed à specie septentrionali non aliter diversa est.

NINTOOA CANESCENS.

Lonicera canescens. Schousb.

HAB. In sepibus circà *Lucentum*, et inter montes *Alpujarras*.

XYLOSTEUM ARBOREUM.

Lonicera arborea. Boiss. Not. sur le Pinsapo. pag. 11.

HAB. In regione media montis *Sierra Nevada*. Habeo etiam ex
Asia, montis Libani convallibus à celeb. Billardiero olim lec-
tum.

OBS. This seems to be a well characterized species between *X. Ibe-
ricum* and *X. dumetorum Moench* from the former of which it dif-
fers by its unconnected fruit, and by its bays which are not fleshcol-
oured but tawney yellow.

VISCUM ALBUM. Linn.

HAB. In ramis olearum circà oppidum *Gaucin*. Fructus matu-
rus coloratus.

ARCEUTHOBIA OXYCEDRI. Bieb.

HAB. In insulis Bætis fluminis propè Luciferi forum.

THAPSIA VILLOSA. Linn.

HAB. In Hispaniae provinciis Bæticâ et Tarragonensi, copiosa
in rupibus siccis. Gothalaunis dicitur *Croca*, ejusque succus
coloratus ad pisces venenandos inservit.

THAPSIA TENUIFOLIA. La Gasc.

HAB. In montibus Malacitanis.

KRUBERA LEPTOPHYLLA. Hoffm.

HAB. Circà Malacam (*Rambur*).

IMPERATORIA OSTRUTHIUM. Linn.

HAB. In locis humidiusculis montis *Sierra Nevada*.

FOENICULUM VULGARE. DC.

HAB. In montibus Lucentinis, et alibi in Bæticâ.

ANETHUM SEGETUM. Linn.

HAB. In Bæticæ arvis frequens.

MEUM ATHAMANTICUM. Jacq.

HAB. In cacumine montis *Sierra Nevada*.

AMMI MAJUS. Linn.

HAB. Per totam Bæticam.

BUNIUM MAJUS. Gouan.

HAB. In collibus circà oppidum *Cintra* in Lusitaniâ.

PIMPINILLA VILLOSA. Schousb.

P. bubonoides. Brot.

HAB. In montibus Malacitanis, et alibi in Bæticâ, et in totâ Lusitaniâ meridionali.

PIMPINELLA SAXIFRAGA. Linn.

HAB. In monte *Sierra Nevada*.

PIMPINELLA TRAGIUM. Vill.

β depressa.

HAB. In collibus Bæticis, β in cacumine montis *Sierra Tejeda*.

SIUM NODIFLORUM. Linn.

HAB. In aquosis Bæticæ vulgaris.

BIFORA TESTICULATA. Reichb.

HAB. In Bæticæ arvis frequens.

CAUCALIS DAUCOIDES. Linn.

HAB. In cacumine montis *Penaguila* circà Lucentum, et alibi in provinceis Bæticâ et Tarragonensi.

ORLAYA MARITIMA. Koch.

HAB. Ad littora Bætica.

ORLAYA PLATYCARPOS. Koch.

HAB. In apricis Malacitanis.

TURGENIA LATIFOLIA. Hofm.

HAB. In monte *Penaguila* agri Lucentini.

TORILIS NODOSA. Gaert.

HAB. In Bæticâ vulgaris.

DAUCUS CAROTA. Linn.**HAB.** Per totam Bæticam.**DAUCUS MARITIMUS.** Lamck.**D. parviflorus.** Desf!**HAB.** In omni Bæticâ, præsertim in maritimis.

OBS. The *D. parviflorus* Desf. as preserved in his herbarium in no ways differs from the plant of the south of France usually known under the name of *D. maritimus*. It will remain to be observed whether this latter is really a distinct species, and not a mere variety of *Carota*, as I am disposed to believe. Several other species which were collected in Andalusia, are all except the following not determinable with any certainty in the present confused state of the genus.

DAUCUS CRINITUS. Desf.**D. meifolius.** Brot!**HAB.** In Lusitaniâ circâ oppidulum *Cintra*.**AMMI VISNAGA.** Lamck.**HAB.** In Bæticæ arvis vulgare.**CACHRYS PTEROCHLÆNA.** DC.**HAB.** In collibus siccis circâ Malacam, Calpen, et alibi in Bæticâ.**BUPLEURUM SPECIOSUM.** Linn. fil.**HAB.** In rupibus Lucentinis, in monte *Sierra Tejeda*, et alibi in Bæticâ.**BUPLEURUM FRUTICOSUM.** Linn.**HAB.** In rupibus maritimis Promontorii Magni in Lusitaniâ.**BUPLEURUM GIBRALTARICUM.** Lamck.**HAB.** In monte Calpe.**BUPLEURUM FRUTICESCENS.** Linn.**HAB.** In Hispaniâ Tarragonensi ad thermas *Caldas de Monbuy* dictas non procul Barcinone.**BUPLEURUM PANICULATUM.** Brot.**HAB.** In montibus Promontorii Magni in Lusitaniâ.

OBS. This species is so similar to the foregoing that it may easily be mistaken for it. It is however suffrutescent only at the base, the inflorescence is usually much more paniculated, and the fruit is oval and not oblong.

BUPLEURUM SEMICOMPOSITUM. Linn.

HAB. In collibus Bæticæ, ubi copiosa circà Malacam, et in montibus *Alpujarras*.

BUPLEURUM ARISTATUM. Barth.

HAB. In collibus Malacitanis.

BUPLEURUM TENUISSIMUM. Linn.

HAB. In fossis circà Malacam.

ERYNGIUM DILATATUM. Lamck.

HAB. In maritimis circà fretum Herculeum, et in arenâ maris propè oppidulum *Ericeira* in Lusitaniâ.

OBS. The Portuguese plant is cespitose and diminutive, but does not appear to differ otherwise from the usual type of the species.

ERYNGIUM CRETICUM. Lamck.

E. glaciale. Boiss.

HAB. In rupestribus siccis editioribus montis *Sierra Nevada*.

OBS. The fruit and inflorescence of the Spanish plant do not differ in any way from those of the Greek specimens. The capitules, the leaves, and particularly those of the involucrum are more robust, but it appears to me to be impossible to distinguish it as a species.

SAXIFRAGA LINGULATA. Bellard.

HAB. In rupibus præeruptis montis *Jovis* propè *Dianium*.

SAXIFRAGA STELLARIS. Linn.

HAB. Ad fontes muscosos vallis *Divi Johannis* (*Barranco de San Juan*) *Alpium Eliberitanarum*, quæ nunc mons *Sierra Nevada*.

SAXIFRAGA CÆSPITOSA. Linn.

HAB. In valle *Divi Johannis* *Alpium Eliberitanarum*.

SAXIFRAGA HYPNOIDES. Linn.

HAB. In rupium rimis montis *Sierra Tejeda*.

SAXIFRAGA GLOBULIFERA. Desf.

HAB. In montibus *Arundæ* loco dicto *Desierto de las Nieves*, legit *Hænselerus* in monte *Sierra de Laurin*.

OBS. The Spanish specimens differ in no way from those gathered by Desfontaines on the opposite chain of mount *Atlas*.

SEDUM VILLOSUM. Linn.

HAB. In fissuris rupium montis *Sierra Tejeda*.

SEDUM CÆRULEUM. Vahl.

HAB. In locis siccis circâ Malacam.

CRASSULA MAGNOLII. DC.

HAB. In rupibus siccis montis *Sierra Tejeda*.

TILLÆA MUSCOSA. Linn.

HAB. In rupibus Bæticæ, loco non notato.

CORRIGIOLA LITTORALIS. Linn.

HAB. Per omnem Bæticam vulgaris.

HERNIARIA CINEREA. DC.

HAB. In provinciis Tarragonensi et Bæticâ vulgatissima. Virtutes lithontripicas tenere credit vulgus, undè nomen à celeb. Candolleo memoratum, *Quebrantapiedras*.

HERNIARIA FRUTICOSA. Linn.

HAB. Circâ oppidulum *Onil* agri Lucentini.

HERNIARIA POLYGONOIDES. Cavan.

HAB. In rupestribus circâ oppidulum *Carratraca*, in montibus circâ Arundam et alibi in Bæticâ.

OBS. The stamens of this plant are not united at the base in a ring as represented by Cavanilles, but are exserted from the summit of the cup (*urceolus*) formed by the united folioles of the calyx, and which surrounds the ovary but is not attached to it. The stigmas are two as Professor de Candolle justly observes and not three as figured by Cavanilles. They are persistent and crown the thin and membranous capsule, which is indehiscent or rather which dehisces partially at the base. A single ovule is suspended from the curved funicle originating at the base of the capsule. The seed is oval, enlarged below, and pointed at the summit. The hilum and chalaza are contiguous, the embryo campylotropous, and exterior, enclosing a proportionally long farinaceous perisperm. By this disposition of the embryo the radicle forms a boss protruded within the tegument which at first sight might be taken for a raphe.

HERNIARIA PANICULATA.

H. caule fruticoso, prostrato, elongato, diffuso ; paniculis filiformibus pluriè dichotomis.

HAB. Circâ thermas agri Lucentini, et in monte *Sierra de Tela*.

OBS. The structure of the flower and fruit in this species is very similar to that of the foregoing, but its prostrate diffuse growth, and spreading panicles, so different from the above, seem to preclude the possibility of uniting them.

LYTHRUM SALICARIA. Linn. var. *tomentosa*.

HAB. In Lusitaniâ ad rivulos circâ oppidum *Cintra* et in Bæticâ.

EPILOBIUM HIRSUTUM. Linn.

HAB. Ad promontorium Charidemum, et ad radices montis *Sierra Nevada*.

EPILOBIUM PUBESCENS. Roth.

HAB. In montosis Lucentinis.

EPILOBIUM TETRAGONUM. Linn.

HAB. Circâ oppidulum *Carratraca*.

EPILOBIUM ALPINUM. Linn.

HAB. In rupibus editioribus Alpium Eliberitanarum ad radices montis *Picacho de la Veleta*.

CUCUMIS COLOCYNTHIS. Linn.

HAB. Circâ Abderam, oppidum *Onil*, et alibi in arenis ustis Bæticæ calidioris.

PRUNUS AMYGDALINA.

P. ramis albidis, spinescentibus, foliis elongato-lanceolatis, acutis, margine glanduloso-serrulatis; pedunculis solitariis; fructu ovato.

HAB. In rupibus siccis altioribus regionis mediæ montis ex-celsi la *Sierra Nevada*.

OBS. It will perhaps be necessary to cultivate this plant to ascertain whether it be really distinct from *P. spinosa*. It is so decidedly different in appearance that I have not hesitated to consider it as a species.

PRUNUS ROSTRATA. Labill.

HAB. In cacumine montis *Sierra Tejeda*.

CERASUS LUSITANICA. DC.

HAB. Ad rivorum scaturigines zonâ juressi Lusitanæ montis mediâ, vulgò *Serra de Gerez*, pistaciis atque arbutis admixta. Lusitanicè *Azereiro*.

POTENTILLA HIRTA. Linn.

HAB. In editioribus montis *Sierra Nevada*.

POTENTILLA CAULESCENS Linn.

HAB. In monte *Sierra Tejeda*.

POTERIUM ANCISTROIDES. Desf.

HAB. In rupibus montis Jovis propè Dianum. Cum specimib⁹ Fontanesianis optimè quadrat, sed folia duplo minor⁹.

CRATAEGUS MAROCCANA. Pers.

HAB. In Calpe monte.

CRATAEGUS TANACETIFOLIA. Poir.

HAB. In monte *Sierra Nevada*.

ULEX NANUS. Smith.

HAB. In altioribus montium Promontorii Magni non procul oppidulo *Cintra*.

ULEX EUROPAEUS. Linn.

HAB. In collibus circâ Portum Calen, Lusitanis *O Porto*.

OBS. This species is replaced by the following in the south of Portugal, which is probably the plant described by Brotero under the name of *U. Europæus*.

ULEX AUSTRALIS. Clement.

U. calycibus glabriusculis, subventricosis, corollæ subæqualibus, foliolo superiore bidentato. Clemente *Ensayo de la Vid.* pag. 291. (1807.)

Ulex provincialis. Lois. Not. pag. 105. tab. 6. fig. 2. (1810).

HAB. In campis arenosis, et in collibus siccis provinciæ Tarraconensis, et per omnem Bæticam, et Lusitaniam meridionalem, copiosissima.

OBS. I cannot see any essential difference between the plant gathered in Provence and the Spanish specimens of *U. australis*, though these latter are much stronger and often considerably larger in all their

parts. We are bound therefore to resuscitate the neglected name of the learned Spaniard Don Simon de Roxas Clemente y Rubio, whose fate it was to write too little, whilst what little he wrote is nearly unknown on this side the Pyrenees. His manuscripts prepared for the press are deposited in the Museum of Natural History of Madrid. Amongst them is a Flora of the Kingdom of Grenada, which would probably have superseded, had it seen the light, much of the detail of this little enumeration.

ULEX GENISTOIDES. Brot.

U. ramis glabris, (junioribus villosulis), cylindraceis , striatis ; vexillo et carinâ extus ad margines tomentosis ; ovario elongato, tomentoso, pluri-ovulato ; leguminibus compressiusculis , angustis, villosis , calyce multò longioribus, 4-5-spermis.

HAB. Propè Olisiponem in arenosis ad sinistram Tagi ripam, et in pinetis non longè à fluvio. Abundat circà *Olhas Vedras*, et totâ viâ ab oppidulo *Moita* ad *Cetobrigam*.

ULEX BOIVINI.

U. ramis glabris, (junioribus villosissimis), sulcatis , subtetragonis ; vexillo et carinâ extus densè villosis ; ovario ovato , brevi, glabro, dorso crinito , 2-3-ovulato ; leguminibus ovatis , complanatis , falcatis, nervoso-marginatis, calyce subpersistente vix duplo longioribus, 2-spermis.

U. genistoides Salzm. exsicc. Tingit. non. Brot.

HAB. In montosis circà Arundam, legi etiam in Monte Magno seu *Djibbel Kibir* Tingitanorum.

OBS. On gathering the *U. genistoides* Brot. in Portugal I immediately perceived that it was not the same plant which I had found in Spain and attributed to that species. My Lisbon tickets bear the following observation « plantæ Hispanicæ (an Genistæ species?) in Turdetaniâ olim lectæ Stauracanthi aphylli nomen incautè in schedis indidi. » The specimens of the same plant which I gathered on the Djibbel Kibir in May 1827 were not in fruit , and I owe to M. Boivin, who has paid great attention to the Flora of the Mediterranean, and particularly to that of its African shores, the first information of the difference between the plants of Brotero and Salzmann, and my Spanish specimens I found identic with the latter. (1) I have much pleasure therefore in attaching to this plant the name of its second discoverer, and the more so as he promises shortly to publish a monographic review of the genera of this section of Leguminosæ. The figure and description of Dr. Lindley (Bot. Reg. tab. 1452) belong to the true *U. genistoides* Brot. raised from Portuguese seeds, but the account of the fruit taken, as Dr. Lindley himself says, from Salzmann's dried specimens, refers to *U. Boivini*. I am clearly of the opinion of that learned author that the genus *Stauracanthus* should not be retained. It is certain that the flattened pods of *U. Boivini*,

(1) I have some specimens gathered near Algesiras which appear to agree with the plant of Brotero, but they are in too imperfect a state to decide upon with any certainty.

though dispermous are not entirely analogous with those of the typical species of *Ulex* any more than is the longer polyspermous fruit of *U. genistoides*. If however we separate them from *Ulex* we must coin two new genera, for they agree together only in being different from it, but they differ in different ways. Moreover generic sections cannot be so accurately fashioned but that their extremities will vary from the type and lean towards other forms, how numerous soever they may be. As the least therefore of two evils I prefer retaining this little group entire since these two species possess the inflorescence, leaves, branches, and facies of *Ulex*, and differ only in having a fruit somewhat more approaching that of *Genista*. This however is a matter of mere convenience, and I am persuaded that the more minutely we examine natural productions, such is the incessant progression of their changes, the more we shall be induced to separate and distinguish them.

GENISTA CANDICANS. Linn.

Genista Canariensis auctt. quoad patriam Hispaniam, Mauritaniam et Græciam. Bot. Reg. tab. 217. non Linn. Herb. !

HAB. In montibus Hispaniæ meridionalis frequens.

OBS. This is a very variable species, the southern forms of which approach very nearly to *G. Canariensis*. The principal difference consists in the flower-spikes being leafy which is never the case in that species, the flowers too in *G. Canariensis* are highly fragrant. The utmost limit of the long-spiked southern form of *G. candicans* is found at Madeira, but after a minute examination I cannot seize upon any certain specific differences, though the plant has altogether another air. This species descends southward as far as Teneriffe where it is of rare occurrence, but altogether similar to the plant of the south of Europe.

GENISTA PATENS. DC.

Spartium patens Cav.

HAB. In monte Sancto Tarragonensis.

GENISTA LINIFOLIA. Linn.

HAB. In Calpe monte, in montibus inter Asindonem et fretum Herculeum, et alibi in Bæticâ.

GENISTA CINEREA. DC.

HAB. In collibus Bæticis frequens.

GENISTA TRIDENTATA. Linn.

HAB. In montosis ad fretum Herculeum, et per omnem Lusitaniam vulgaris.

GENISTA SPHEROCARPA. Linn.

HAB. Circâ Malacam atque oppida Carratraca, Velez Malaga, et alibi in Bæticâ.

GENISTA MONOSPERMA. Linn.

HAB. In arenosis Gaditanis copiosissima.

GENISTA UMBELLATA. Desf.

HAB. In collibus Bæticis ubi vulgò *Bolina*.

GENISTA HORRIDA. DC.

HAB. In jugis montium *de las Alpujarras*, in monte *Sierra de Gador*, et in monte *Sierra Nevada*.

GENISTA HISPANICA. Linn.

HAB. In Bæticā et Lusitaniā vulgaris.

GENISTA TRIACANTHA. Brot.

HAB. In Bæticā ex specimine herbarii cl. Hænseler.

GENISTA SCORPIUS. DC.

HAB. In montibus aridis Hispaniæ Tarragonensis.

CYTISUS SPINOSUS. Lamck.

HAB. Communis in Hispaniæ Tarragonensi.

CYTISUS LANIGERUS. DC.

HAB. In asperis provinciæ Bæticæ.

CYTISUS TRIFLORUS. L'Herit.

HAB. In agro Barcinonensi.

CYTISUS TRIBRACTEOLATUS.

C. ramis 4-gonis, divaricatis, decumbentibus; foliis 5-foliatis, sessilibus, verticillatim glomeratis, foliolis ovatis, pallidè sericeis; floribus in axiliis foliorum glomeratis, pedicellatis; calyce bilabiato, labio inferiore elongato, angusto, apice. 5-dentato; leguminibus....

HAB. In cacumine montis *Picacho de Alcalá de los Gazules*, bidentium morsu assiduo tonsus, et inde forsan solo et rupibus applicata.

SAROTHAMNUS PATENS.

Cytisus patens. Linn.

S. ramis cylindraceis striatis; foliis 5-foliatis, pedunculatis, foliolis elongato-ovatis, superioribus lanceolatis, subsessilibus; calycis labio inferiore subintegro; carinā alarum longitudine; stylo subtūs hirsuto, ovario crasso, densè piloso; siliquā breviusculā lanatā.

HAB. In monte Lunæ seu Cynthiæ, hodiè *Serra de Cintra* in Lusitaniā.

SAROTHAMNUS BÆTICUS.

S. ramis cylindraceis, striatis; foliis 5-foliatis, foliolisque pedunculatis, obovatis, summis rariis simplicibus; calycis labio inferiore 5-dentato; carinâ alis breviore; stylo glabro, ovario elongato piloso; leguminibus.....

HAB. In montosis circâ *Alcalá*, et ex cl. Rambur in pluribus Bæticæ collibus.

SOROTHAMNUS VIRGATUS.

S. ramis inferioribus cylindraceis, striatis, cinereis, ramulis angulatis ad folia nodulosis; foliis 3-foliatis, sessilibus, mox deciduis, foliolis linearibus, superioribus simplicibus; calyeis labro inferiore 5-dentato, dentibus saepius obsoletis; corollâ amplâ; ovario cylindraceo, pilosiusculo, leguminibus.....

HAB. In collibus Bæticis ex herbariis Ramburiano, et Hænseleriano.

OBS. These two latter species are very nearly allied to *S. patens* and to *S. scoparius* Wimm. but appear sufficiently distinct from both, though *S. virgatus* may perhaps prove a southern variety of the latter. *S. Bæticus* approaches very near to *S. patens* but is certainly different. It differs likewise from *S. arborens (spartum arboreum Desf.)* by the shape of its calyx, its ovary, and its leaves, which are not fasciculated as in that species, its more striated branches, and other points.

CHASMONE ARGENTEA. E. Mey.

HAB. In provinciis Bæticâ et Tarragonensi vulgaris.

ADENOCARPUS TELONENSIS. Gay.

HAB. In collibus siccis circâ Malacam, et alibi in Bæticâ.

ADENOCARPUS BOISSIERI.

A. decorticans. Boiss. Not. sur l'Ab. Pinsapo. pag. 9.

HAB. In vallibus calidioribus montis *Sierra Nevada*.

OBS. As the verb *decortico* can only be used in an active sense the epithet *decorticans* is inadmissible. Since then it must be changed, this splendid species cannot well receive a more appropriate appellation, than that which I give it, in honour of the author from whose labours we learn so much of the beautiful region it inhabits. It is indeed truly astonishing that an European plant of almost arboreous stature with spikes of flowers sometimes a foot in length should so long have escaped detection. Its place in the linear series is close to *A. Hispanicus*, to which, though very entirely distinct, it approaches the nearest.

ONONIS VISCOSA. Lamck.

HAB. In agro Tarragonensi.

ONONIS RAMOSISSIMA. Desf.

HAB. In arenâ littoris Bætici frequens.

ONONIS PICTA. Desf.

HAB. In rupibus Lucentinis.

ONONIS HISPANICA. Lamck.

HAB. In promontorio Charidemo, et ad littora Malacitana.

ONONIS VARIEGATA. Linn.

HAB. In arenâ maris ad basin montis Calpes.

ONONIS ORNITHOPODIOIDES. Linn.

HAB. Circâ Malacam.

ONONIS SPECIOSA. La Gasc.

HAB. In vineis agri Malacitani.

ONONIS ARRAGONENSIS. Ass.

HAB. In monte *Desierto de las Nieves*, circâ Arundam.

ONONIS ROSÆFOLIA. DC.

HAB. In torrentis *Genil* locis glareosis propè Eliberim.

ONONIS CENISIA. Linn.

HAB. In monte *Sierra Nevada*.

ONONIS MINUTISSIMA. Linn.

HAB. In provinciis Tarragonensi et Bæticâ vulgaris.

ONONIS CAPITATA. Cav.

HAB. In monte *Sierra de Onil*, et alibi in agro Lucentino, in montibus Malacitanis, et Barcinonensibus.

ONONIS FRUTICOSA. Linn.

HAB. In rupe altâ *el Peñon de Jijona*, et in monte *Sierra de Penaguila*.

ONONIS SPINOSA. Linn.

HAB. Circâ oppidulum *Carratraca*, et alibi in montibus Bæticis.

ONONIS HISPIDA. Desf.

HAB. In monte *Sierra Nevada*.

ONONIS BREVIFLORA. DC.

O. fætida. Schousb.

HAB. In montibus *las Alpujarras*.

ONONIS SERRATA. Forsk.

HAB. In arenosis Bæticis frequens, et in pinetis inter lacum *l'Albufera*, et dexteram Tagi ripam in Lusitaniâ.

ONONIS MITISSIMA. Linn.

HAB. In arvis Bæticis frequens.

ONONIS ALOPECUROIDES. Linn.

HAB. In arvis ad promontorium Junonis.

ANTHYLLIS VULNERARIA. Linn.

HAB. Plurimæ varietates per totam Hispaniam meridionalem.

ANTHYLLIS WEBBIANA. Hook.

A Tejedensis. Boiss. *Not. sur le Pinsap.* pag. 10.

HAB. In rupestribus altioribus montis *Sierra Tejeda*, et ex cl. Rambur in glareâ torrentis *Genil* ab Alpibus Eliberitanis ut videtur devecta.

OBS. This is certainly the plant described by M. Boissier as *A. Tejedensis*, I sent no other seeds of *Anthyllis* to England. Its having assumed a larger form when cultivated prevented him from readily recognizing it as figured. (See Bot. Mag. tab. 5284 and Hook. Comp. to Bot. Mag. vol 1. pag. 187.) Sir W. J. Hooker having seen native specimens is now persuaded that the species is very distinct from *A. Vulneraria*. There is it is true a variety of this latter species growing on the same mountain with purple flowers, but which I readily distinguished on the spot as a mere variation of *Vulneraria*, whereas I marked the former as new, and carefully gathered its ripe pods.

ANTHYLLIS CYTISOIDES. Linn.

HAB. In montibus Hispanicis à Gadibus ad Barcinonem.

ANTHYLLIS GENISTÆ. Duf.

HAB. In saxosis ad thermas agri Lucentini.

ANTHYLLIS CORNICINA. Linn.

HAB. Circâ Gades et ad oppidum *Algesiras*.

ANTHYLLIS ERINACEA. Linn.

HAB. In montosis Lucentinis, et alibi in Bæticâ communis.

LEOBORDEA LUPINIFOLIA. Boiss.

HAB. Propè Malacam in fissuris rupium et torrentium arenâ.

TRIFOLIUM SCABRUM. Linn.

HAB. Circâ Malacam, Tarragonem, et alibi.

TRIFOLIUM LAPPACEUM. Linn.

HAB. In montosis Bæticis.

TRIFOLIUM CHERLERİ. Linn.

HAB. Circè Malacam.

TRIFOLIUM STELLATUM. Linn.

HAB. In provinciis Tarragonensi et Bæticâ frequens.

TRIFOLIUM SUBTERRANEUM. Linn.

HAB. In monte *Sierra Nevada*.

LOTUS CRETICUS. Linn.

HAB. Ad lacum Valentimum, et in arenosis maritimis totius Bæticæ.

LOTUS CYTISOIDES. All.

HAB. In collibus Malacitanis.

LOTUS HISPIDUS. Desf.

HAB. In monte *Sierra Tejeda*, occurrit etiam in monte *Sierra Nevada*, et in montibus altis inter oppida *Velez Malaga* et *Alhama*, ubi parvula hispidissima.

TETRAGONOLOBUS PURPUREUS. Mœnch.

HAB. Circè Divi Roccii oppidulum, et alibi in Bæticâ.

TETRAGONOLOBUS SILIQUOSUS. Roth.

HAB. In montibus Bæticæ communis.

ASTRAGALUS EPIGLOTTIS. Linn.

HAB. In collibus Malacitanis.

ASTRAGALUS PENTAGLOTTIS. Linn.

HAB. In Bæticæ collibus siccis.

ASTRAGALUS BÆTICUS. Linn.

HAB. In campis Bæticæ.

ASTRAGALUS MONSPESSULANUS. Linn.

HAB. In agro Tarragonensi.

ASTRAGALUS SESAMEUS. Linn.

HAB. Circè oppidum *Reuss*, et alibi in agro Tarragonensi.

ASTRAGALUS MACRORHIZUS. Linn.

HAB. In collibus Bæticis, in monte *Sancto*, et alibi in provincia Tarragonensi.

ASTRAGALUS NARBONENSIS. Linn.

HAB. In monte *Sierra de Alfacar* (*Rambur*).

ASTRAGALUS CRETICUS. Lamck.

HAB. In montibus *las Alpujarras*, in rupibus elatioribus montis *Sierra Tejeda.*, et ex cl. *Rambur* in monte *Sierra Nevada*.

PHACA BÆTICA. Linn.

HAB. In Bæticæ collibus.

BISERRULA PELECIINUS. Linn.

HAB. In Bæticæ *vulgaris*.

CORONILLA MINIMA. Linn.

HAB. In apricis Bæticæ frequens.

CORONILLA CRETICA. Linn.

HAB. Propè *Olisiponem*.

CORONILLA EMERUS. Linn.

HAB. In *Hispaniâ Tarragonensi*.

CORONILLA GLAUCA. Linn.

HAB. In monte *Arabrigâ*, et in montibus promontorii *Magni* in *Lusitaniâ*.

CORONILLA JUNCEA. Linn.

HAB. In montibus *Lucentinis* et *Tarragonensisibus*.

ARTHROLOBIUM SCORPIOIDES. DC.

HAB. In arvis Bæticis frequens.

HIPPOCREPIS CILIATA. DC.

HAB. In arvis circè *Malacam*, *Tarragonem* et alibi

HIPPOCREPIS SCABRA. Linn.

HAB. In collibus *Lucentinis*.

HEDYSARUM SPINOSISSIMUM. Linn.

H. capitatum. Desf.

HAB. In rupibus Bæticis propè *Eliberim* (*Rambur*).

ONOBRYCHIS CAPUT GALLI. Lamck.

HAB. In monte *Penaguila agri Lucentini*.

ONOBRYCHIS SATIVA. Lamck.

HAB. Circè *Barcinonem*.

ONOBRYCHIS SAXATILIS. All.

HAB. In montibus Lucentinis.

ONOBRYCHIS STENORHIZA. DC.

HAB. Circà *Aygues* oppidum thermasque agri Lucentini.

ONOBRYCHIS ERIOPHORA. Desv.

HAB. In Lusitaniâ loco non notato.

LATHYRUS CLYMENTUM. Linn.

HAB. In monte Calpe et circà Malacam.

LATHYRUS TINGITANUS. Linn.

HAB. Circà Malacam et in pomœriis oppidi Tartessi seu *Tarifa*.

LATHYRUS CICERA. Linn.

HAB. In arvis circà Tarragonem.

LATHYRUS OCHRUS. Linn.

HAB. Inter segetes totius Hispaniæ australioris.

LATHYRUS SYLVATICUS. Linn.

HAB. Propè Malacam, et in Lusitaniâ ad oppidum *Cintra*.

LATHYRUS SETIFOLIUS. Linn.

HAB. Circà Malacam.

VICIA GRACILIS. Lois.

HAB. Ad Calpen.

VICIA CRACCA. Linn.

HAB. In agro Tarragonensi.

VICIA POLYPHYLLA. Desf.

HAB. Ad montem Sanctum Tarragonensium.

VICIA ONOBRYCHIOIDES. Linn.

HAB. Propè Eliberim (*Rambur*).

VICIA ATROPURPUREA. Desf.

Vicia villosa. Brot.

HAB. In provinciis Tarragonensi et Bæticâ vulgaris, et ad sinistram Tagi ripam propè Olisiponem, et alibi in Lusitaniâ.

VICIA NARBONENSIS. Linn.

HAB. In arvis Tarragonensibus.

VICIA LUTEA. Linn.

HAB. In Bæticæ arvis vulgaris.

VICIA HIRTA. Balb.

HAB. In arvis Bæticis et Tarragonensis frequens.

VICIA SATIVA. Linn.

HAB. In arvis totius Hispaniae australioris frequens.

VICIA PEREGRINA. Linn.

HAB. In Hispania Tarragonensi et in Bætica vulgaris.

PISUM ARVENSE. Linn.

HAB. Circà Tarragonem.

LUPINUS ANGUSTIFOLIUS. Linn.

HAB. In agris Bæticis vulgaris.

LUPINUS LUTEUS. Linn.

HAB. Ad margines agrorum in Bæticâ.

LUPINUS HIRSUTUS. Linn.

HAB. Circà Malacam ad ripas torrentis.

CNEORUM TRICOCCUM. Linn.

HAB. Inter Malacam et oppidulum *Torre de la mar.*

RHAMNUS ALATERNUS. Linn.

HAB. Varietates plurimæ per totam peninsulam Ibericam.

RHAMNUS INFECTORIUS. Linn.

HAB. In monte *Sierra Tejeda*, et in reliquis Bæticæ montibus vulgaris.

RHAMNUS OLEOIDES. Linn.

HAB. In rupibus montis *Sierra Nevada.*

RHAMNUS LYCIOIDES. Linn.

HAB. In provinciâ Tarragonensi et in Bætica vulgaris.

ZIZIPHUS LOTUS. Lamck.

HAB. In arenâ maris propè promontorium *Charidemum.*

OBS. This species belongs to the interior of Africa, it is exceedingly abundant in the plain around the city of Morocco, but does not descend as far as the Canaries. Its northernmost station is probably

the south of Sicily, and this hot corner of Spain, or about the 37th degree of north latitude. It does not appear in Sardinia, nor in Portugal, unless it be yet to be found in the Algarves, for the cultivated plant described by Brotero under this name is probably a variety of *Zizyphus vulgaris*.

FAGONIA CRETICA. Linn.

HAB. Circà Lucentum, et alibi in aridis Bæticæ.

PEGANUM HARMALA. Linn.

HAB. In pomœriis oppidorum Bæticorum.

RUTA ANGUSTIFOLIA. Pers.

HAB. In montibus Saguntinis.

OBS. This plant and *R. bracteosa*, *macrophylla*, *divaricata*, and perhaps some others appear to be peculiar developments of a common species which is probably *R. Chalepensis*, Linn.

RUTA MONTANA HORT. Kew.

HAB. Inter oppida Velez Malaga et Alhama, necnon in collibus Olisiponensibus.

HAPLOPHYLLUM LINIFOLIUM. A, de Juss.

HAB. In Bæticâ circà Gades, ex herb. Cabrerae.

ZYGOPHYLLUM ALBUM. Linn.

HAB. In arenis salsis ad ostium Iberi.

OBS. This is the true *Z. album*, L. distinguished by its stellated capsule from the *Z. Fontanesii* Webb et Berth. *Phytogr. Can.* p. 17, tab. 1. which has orbicular or orange-shaped fruit flattened frequently at its two poles. This Spanish station is wonderfully northern for an Egyptian species, nearly the 41st degree of N. latitude.

ERODIUM MALACOIDES. Willd.

HAB. In arvis et ruderatis Hispaniæ Bæticæ et Tarragonensis cum *E. moschato* et *botryoide vulgare*.

ERODIUM TRICHOMANEFOLIUM. L'Herit.

HAB. In cacumine montis *Sierra Tejeda*, legit etiam in monte Nigro, seu *Sierra Prieta*, et in monte *Sierra Nevada* cl. Rambur. A plantâ *Syriacâ Billardieri* in monte Libano lectâ nullo prorsus discrepat modo.

ERODIUM ASPLENIOIDES. Willd.**HAB.** In monte *Sierra Nevada*.**ACER OPALUS.** Linn.**HAB.** In dumetis montis *Sierra Nevada*.**HYPERICUM DIVERSIFOLIUM.** DC.**HAB.** In collibus Bæticis et Saguntinis, et in Lusitaniâ ad opidum *Cintra*.**HYPERICUM CRISPUM.** Linn.**HAB.** In arvis siccis Bæticæ.**HYPERICUM TOMENTOSUM.** Linn.**HAB.** Ad fossas circâ Malacam, et alibi in Bæticâ.**HYPERICUM LUSITANICUM.** Poir.**HAB.** In Bæticâ loco non notato.**HYPERICUM ERICOIDES.** Linn.**HAB.** In rupestribus humidiusculis montis *Sierra de Alfacar* (*Rambur*).**MALVA PARVIFLORA.** Linn.**HAB.** Ad vias in Bæticâ.**MALVA ROTUNDIFOLIA.** Linn.**HAB.** Varietas pusilla in monte *Sierra Tejedo*.**MALVA CRETICA.** Linn.**HAB.** In monte Jovis propè Dianum.**MALVA HISPANICA.** Linn.**HAB.** In collibus Malacitanis.**MALVA TOURNEFORTIANA.** Linn.**HAB.** In collibus Malacitanis.

LAVATERA MARITIMA. Linn.

HAB. In collibus Saguntinis, et in Bæticâ.

LAVATERA OLbia. Linn.

HAB. In collibus Olisiponensibus et Cintransi.

LAVATERA OBLONGIFOLIA. Boiss.

HAB. In cistetis aridis montium Bæticorum *las Alpujarras*. Co-litur in horto Milfordiensi è seminibus jam ab anno 1826 ex Hispaniâ missis.

ALTHAEA OFFICINALIS. Linn.

HAB. In pratis argillosois veteris regum Alhamaridum, (nunc Wellintoniae et Lanciae Transcudanæ ducis,) villæ *el Soto de Roma*.

LINUM MARITIMUM. Linn.

HAB. In arenosis provinciæ Tarragonensis et in Bæticâ cum L. Gallico frequens.

LINUM TENUIFOLIUM. Linn.

HAB. In agro Tarragonensi.

LINUM SUFFRUTICOSUM. Linn.

HAB. In monte *Sierra de Agua*, in collibus Gaditanis, et alibi in Bæticâ.

LINUM NARBONENSE. Linn.

HAB. In agro Tarragonensi.

QUERIA HISPANICA. Linn.

HAB. Circâ Gades.

ALSINE SEGETALIS. Linn.

HAB. In arvis Bæticis.

ALSINE RUBRA. Wahl.

HAB. In arvis Bæticis frequens.

ALSINE MARGINATA. Reichb.

HAB. In littoribus arenosis lacûs Valentini.

ALSINE PROCUMBENS.

*Arenaria procumbens. Wahl.***HAB.** In fissuris rupium apricarum circà Malacam, Eliberim,
et alibi in Bæticâ.

ARENARIA SERPYLLIFOLIA. Linn.

HAB. In Bæticâ frequens.

ARENARIA PURPURASCENS. Ram.

HAB. In stagnis elatis prope verticem montis *Sierra Nevada*.

ARENARIA TETRAQUETRA. Linn.

 β *imbricata*.*A. imbricata. La Gasc.**A. amabilis. Bory.***HAB.** In Bæticæ collibus frequens. β In cacumine montis *Sierra Nevada*.ARENARIA PUNGENS. Clem. (*in La Gasc. Gen. et Sp. p. 15.*)**HAB.** In cacumine montis *Sierra Nevada*.

OBS. I can scarcely perceive in this species any thing beyond an uniflorous variety of the foregoing, and I am strengthened in this opinion by the identity of its internal structure and fruit. The differences of its appearance are considerable. Its strait or slightly recurved subulate leaves are 6 to 8 lines long, the sepals are 4 lines in length, and the flowers are placed on short foot-stalks about 6 lines long, so that the upper pair of leaves do not form bracts at the base of the calyx as is commonly the case in *Arenaria tetraqueta*. Such differences may possibly be specific, as I have not met with any other variety in which they are found, and it is singular that the plant occurs almost in contact with the var β of the above.

CERASTIUM TOMENTOSUM. Linn.

HAB. In monte *Sierra Tejeda*.

CERASTIUM GLOMERATUM. Thuill.

*C. minutulum Desmoul. in Dur. exsicc. Astur.***HAB.** In rupibus montis *Picacho de Alcalá de los Gazules*.

DIANTHUS PROLIFER. Linn.

HAB. In Bæticâ *vulgaris*.

DIANTHUS GALICUS. Pers.

HAB. In montosis ad promontorium *Magnum* in *Lusitaniâ*.

DIANTHUS ATTENUATUS. Smith.

*D. Malacitanus. Hæns!***HAB.** In collibus *Malacitanis*, in monte *Jovis* propè *Dianium*, in

monte *Penaguila* agri *Lucentini*, in montibus *Alpujarras*, et
alibi in rupestribus Bæticis frequens.

DIANTHUS PUNGENS. Linn.

β minor.

D. Hispanicus. Ass.

HAB. In montosis Bæticis. β In monte *Sierra Tejeda*.

SAPONARIA OCYMOIDES. Linn.

HAB. In Hispaniâ citeriore propè *Falcette*.

SAPONARIA VACCARIA. Linn.

HAB. In monte *Sierra Nevada*.

CUCUBALUS BACCIFER. Linn.

HAB. In sepibus circâ oppidum *Athama*.

SILENE MARITIMA. With.

HAB. In arenâ maris ad ostia *Durii*.

SILENE GALlica. Linn.

HAB. Varietates plurimæ per totam Hispaniam meridionalem.

SILENE DISTYCHA. Willd.

S. tricuspidata. Desf!

S. coarctata. Duf! La Gasc! Salzm!

HAB. In collibus Bæticis.

SILENE NOCTURNA. Linn.

HAB. In arvis Bæticis et Tarragonensisibus frequens. Ultrâ formas mirè varias huc olim relatas, referendæ sunt *S. pinguis* Vahl. *S. apetala* Willd. *S. nyctantha* Willd. *S. brachypetala* Rob. et Cast. *S. neglecta* Ten.

SILENE VESPERTINA. Retz.

HAB. In arvis et ruderatis Bæticæ frequens. Hic quoque ultrâ species auctorum huc dudum relatas, atque, ut credo, olim reducendas, jam eodem ductandæ sunt insuper. *S. sericea* All! *S. canopica* Del! *S. tubiflora* Duf! *S. canescens* Ten! *S. pubescens* Ott! *S. decumbens* Ott! Salzm! *S. diffusa* Mor!

SILENE NICÆENSIS. All.

*S. arenaria. Desf!***HAB.** In arenosis provinciæ Bæticæ frequens præsertim maritimis, et longè à mari propè Eliberim.

SILENE CONOIDEA. Linn.

HAB. In arvis circà oppidum *Onil* agri Lucentini, et alibi in Bæticâ.

SILENE HISPIDA. Desf.

HAB. In arvis Malacitanis.

SILENE INAPERTA. Linn.

HAB. In rupibus siccis circà Eliberim.

SILENE RUBELLA. Linn.

*S. segetalis. Duf!***HAB.** In arvis Bæticæ frequens.

SILENE NUTANS. Linn.

HAB. In rupibus regionis mediæ montis *Sierra Nevada*.

SILENE RAMBURIANA.

S. caulis decumbentibus, basi lignosis; foliis omnibus sessilibus, linear-lanceolatis, acutis, molliter glanduloso-pubescentibus, subtus venosulis, 5-5-nerviis, pedunculis brevibus 4-2-floris; calycibus strictis 10-purpureo-striatis, glanduloso-pubescentibus, longissimis; petalis venosis, intùs purpureis, limbo ad medium usque in laminas binas angustas, obtusas, partito, fauce parapetalis 2 auctâ; gynophoro capsulâ ferè duplò longiore.

HAB. In rupestribus aridis regionis mediæ montium Eliberitanorum *de la Sierra Nevada*, ubi nos mense Augusto fructiferum legimus, Junio floridum invenit cl. Rambur.

OBS. I take the opportunity of dedicating this species to M. Rambur well known to zoologists by his Fauna of Andalusia, and whose herbarium formed in the same rich country contains many interesting plants not found either by M. Boissier or myself. The present species approaches both *S. Vallesiaca*, Linn. and *S. longiflora*, Ehrh. It is distinguished from the former by its inflorescence, and from the latter by its cespitose habit and other characters.

SILENE VELUTINA. Pourr.

*S. suffruticosa. Desf!**S. Salzmanni. Ott!***HAB.** In rupibus præruptis montis Calpes. Legit etiam in monte Anticariae, seu *Sierra de Antequera* cl. Rambur.

OBS. This species is easily distinguishable from the preceeding

by its ovate leaves, pubescent, but not glandulous, by its many-flowered stalks, and its much shorter gynophore. The *S. Requienii* Otth. comes very near this species, but is a variety of *S. fruticosa*, Linn.

FRANKENIA PULVERULENTA. Linn.

F. virens. Desf. Cat. Hort. Par. pag. 407!

HAB. In littore Hispaniensi vulgaris.

OBS. The *F. virens*, Desf. is the larger southern form of this species with revolute pointed leaves, such as it occurs in Egypt and the Canary Islands, though I neglected noting this synonym in the *Photographia Canariensis*. My specimens collected at Cadiz agree entirely with the plant of Desfontaines.

FRANKENIA CAPITATA. Webb et Berth. Phytogr. Can. pag. 131.

α *hirsuta* *F. hirsuta*. Linn? *F. intermedia*. DC.

β *lævis*. *F. lævis*. Linn.

γ *thymifolia*. *F. thymifolia*. DC.

HAB. α Frequens in littore Bætico. β Ad fretum Herculeum circa Calpen montem. γ Propè oppidum Alhama.

FRANKENIA REVOLUTA. Forsk.

F. Corymbosa. Desf!

HAB. Inter Eliberim et Portum Magnum. Totam insulam, seu scopolum *Alboran*, inter Hispaniam et promontorium Africæ Rusadir sitam, stirpibus cæteris ferè omnibus exclusis, densissimè vestit, occurrit etiam copiosa in Tribus Insulis.

POLYGALA VULGARIS. Linn.

HAB. In provinciâ Tarracensi, et in montibus Bæticæ *Sierra Tejeda* et *Sierra Nevada*.

POLYGALA AMARA. Linn.

HAB. Ad ripas fluminis *Basoz* propè prædium Carthusianorum *Barcinonensium* et circa oppidum *Reuss*.

POLYGALA MONSPELIACA. Linn.

P. glumacea. Sibth. et Smith?

HAB. Per totam Hispaniam meridionalem.

POLYGALA SAXATILIS. Desf.

*P. juniperina. Cav.**P. linearis. La Gasc. ex Hæns. herb.*

HAB. In montibus non procul cœnobio Carthusianorum Barcinoensem, circè Tarraconem, in montibus circè oppidulum *Carratraca*, cæterisque Malacitanis, et alibi in Bæticâ. Invenit etiam in monte *Sierra Segura* venerabilis monachus *Muñoz*. In Lusitaniâ occurrit copiosa trans Tagum inter arbusta arenæ auriferae.

POLYGALA MAJOR. Jacq.

*P. rosea. Desf!***HAB.** In monte *Sierra de Alfacar (Rambur)*.

Obs. I have carefully compared the plant of Desfontaines with that of Jacquin, and have found them identic. The length of the gynophore, on the shortness of which in his plants Desfontaines founded his species, is the same in both.

POLYGALA MICROPHYLLA. Linn.

*Ic. Hoffmannss. et Link. Fl. Port. tab. 56. Brot.**Phyt. Lus. vol. 2. tab. 175.*

HAB. Ad montem *Picacho de Alcalá de los Gazules*, et in dumetis montosis inter oppida *Alcalá* et *Algesiras*. In Lusitaniæ ericetis vulgaris.

DROSOPHYLLUM LUSITANICUM. Link.

HAB. Propè oppidum *Algesiras*.

RESEDA LUTEA. Linn.

HAB. In Bæticâ vulgaris.

RESEDA LANCEOLATA. La Gasc.

HAB. In montibus *las Alpujarras*, et propè Portum Magnum.

A precedente non multum diversa, et, ob fructum longius productum *R. crystallinæ*, Webb. et Berth. affinis.

RESEDA STRICTA. Pers.

HAB. In monte *Sancto Tarraconensium*.

RESEDA ALBA. Linn.

HAB. In montibus Calpe, *las Alpujarras, Sierra Tejeda*, et alibi in Bæticâ.

RESEDA GIGANTEA. Pourr.

HAB. In torrentium glareâ propè Eliberim (*Rambur*). Præcedenti valdè affinis.

RESEDA PHYTEUMA. Linn.

HAB. In Hispaniis frequens, variat caule et foliis hispidis.

RESEDA MACROSPERMA. Reichb.

HAB. Propè Gades, *Alcalá de los Gazules*, et passim per totam Bæticam.

LUTEOLA TINCTORIA. Var. *australis* Webb et Berth. *Phyt. Can.* pag. 106.

HAB. In Bæticæ arvis et ruderatis vulgaris.

LUTEOLA COMPLICATA.*Reseda complicata.* Bory.

HAB. In montibus editioribus Alpium Eliberitanarum, legi ad basin cacuminis excelsi *el Picacho de la Veleta*, ubi primus armis accinctus invenit celeberrimus chiliarchus Bory. In monte Mulahesen, qui ter centum et amplius pedes speculæ (seu *de la Veleta*) rupes supereminet non defectura, quem tamen, quod nunc mihi dolet, è longinquò tantum prospicere, nec aggredi unquam licuit.

OBS. The character of the genus *Luteola* (see *Phytogr. Can.* p. 104) must be altered so as to admit this species and the *Luteola glauca* (*Reseda glauca*, Linn.). The capsule in the three species is similarly formed, and differs only in the number of its valves, a difference occurring equally in the genus *Reseda*, and I learn from M. Gay, who has made long and accurate researches on the species of this family, that the value of the number of parts in the group is less than I supposed, and indeed almost null. Another difference between *L. tinctoria* and its two congeners consists in the single large upper petal of the former, but this anomaly has been most ingeniously explained, and its differential value diminished in the learned memoirs of M. A. de St-Hilaire on the *Resedaceæ* (see *Prem. Mem.* pag. 14. likewise our *obs. ad calc. Resedellæ Phyt. Can.* pag. 107). Even if we do not admit the very remarkable hypothesis of M. de St-Hilaire, there is nothing in the enlargement of one petal and not of two in this strange family to prevent the union of the three species of *Luteola*. The genus therefore, as I propose to reconstruct it, will contain two groups, one formed of *L. tinctoria*, the other of *L. glauca*, and *L. complicata*. I intend to develop this view of it in the Spanish iconography now preparing.

ASTROCARPUS SESAMOIDES. DC.

HAB. In Bæticæ montibus *Sierra de Agua*, et alibi. Var. purascens per totam Lusitaniam occurrit.

VIOLA CANINA. Linn.

HAB. In agro Tarragonensi.

VIOLA HIRTA. Linn.

HAB. In monte *Monserrat*.

VIOLA ARBORESCENS. Linn.

V. suberosa. Desf.

HAB. In rupestribus circâ Malacam, ad promontorium Junonis, in pinetis Gaditanis, et alibi in Bæticâ.

MNEMION TRICOLOR. Spach.

HAB. Per totam Bæticam et Hispaniam Tarragonensem.

MNEMION TENELLUM.

Viola tenella. Poir!

HAB. In rupestribus siccis propè cacumen montis *Sierra Nevada*.

MNEMION LAGASCÆ.

M. caulis elongatis, repentibus, subalatis; foliis rotundatis, aut ovatis, glabris, integris, aut sinuato-crenatis, petiolatis, stipulis conformibus; calcare brevi, saccato.

Viola Cenisia. La Gasc. et Rodr. Anal. Cienc. Nat. vol. 5. pag. 270.

HAB. In locis petrosis humidis summi montis *Sierra Nevada*.

OBS. This addition to the pansies, which M. Spach has separated from the true violets, resembles entirely the *M. cenisium*, but amongst the many varieties of that species I have never met with any having so short a spur. After all perhaps it is only a variety of that plant, for the manner of growth, and the leaves are identic but the flowers are smaller, which may account for the shortness of the spur.

CHRYSION BIFLORUM. Spach.

HAB. In rupibus altioribus montis *Sierra Nevada*.

FUMANA VULGARIS. Spach.

β major *Cistus Fumana* α *calycinus*. Desf.

HAB. In collibus Bæticis et Tarragonensis vulgaris.

FUMANA LÆVIPES. Spach.

HAB. In monte Jovis propè Dianum et per totam Bæticam.

FUMANA THYMIFOLIA. Spach.

β *viscida* *Helianthemum glutinosum*. Linn.

γ *glabra* *Cistus laevis*. Cav.

HAB. In monte *Sierra Nevada*, in montosis Lucentinis, et per totam Bæticam. β Circà Barcinonem, Tarragonem, ad ostia Iberi, in montibus Malacitanis, in monte Arabrigâ et alibi.
 γ In arenosis ad lacum Valentini, qui nunc *la Albufera*.

HELIANTHEMUM LEDIFOLIUM. Willd.

HAB. In Bæticæ siccis frequens.

HELIANTHEMUM SALICIFOLIUM. Pers.

HAB. In siccis circà *Alcalá de los Gazules*, et alibi in Bæticâ.

HELIANTHEMUM ÆGYPTIACUM. Mill.

HAB. Inter Gades et *Alcalá de los Gazules*, in monte *Sierra de Agua*, et alibi in Bæticâ passim.

HELIANTHEMUM VARIABILE. Spach.

β *discolor*. Spach.

γ *hirtum*. Spach.

HAB. Per Hispaniam meridionalem ubiqùè. γ In agris Barcinensi, Tarragonensi, Gaditano, et alibi frequens.

HELIANTHEMUM LAVANDULÆFOLIUM. DC.

HAB. Circà Dertosam, Lucentum, et alibi per provincias ambas in rupestribus siccis communis.

HELIANTHEMUM SQUAMMATUM. Pers.

HAB. Ad thermas agri Lucentini, et alibi circà Lucentum vulgare.

RHODAX CHAMÆCISTUS. Spach.

HAB. Per totam Bæticam vulgatissima, et in Lusitaniæ monte Arabrigâ.

RHODAX DICHOTOMUS. Spach.

HAB. Ad Dertosam et alibi in Hispaniâ meridionali.

RHODAX ORGANIFOLIUS. Spach.

HAB. In collibus Saguntinis.

TUBERARIA ANNUA. Spach.

HAB. Per totam Bæticam vulgaris.

TUBERARIA PERENNIS. Spach.

HAB. In locis argillosis Bæticæ frequens.

HALIMUM ATRIPLICIFOLIUM. Spach.

HAB. In montosis Bæticis propè Arundam loco dicto *Desierto de las Nieves*, et in monte *Sierra Torroz*.

HALIMUM LEPIDOTUM. Spach.

HAB. Per totam Bæticam vulgare.

HALIMUM UMBELLATUM. Spach.

HAB. In monte Juresso Lusitaniæ.

LADANIUM LAURIFOLIUM. Spach.

HAB. In cistetis Hispánicis frequens et copiosissima.

LADANIUM OFFICINARUM. Spach.

HAB. In cistetis ad radices montis Mariani, Malacitanis, et alibi copiosissima per totam Hispaniam australē.

LEDONIA POPULIFOLIA. Spach.

HAB. Ad radices montis Mariani, in monte Arabrigā, et alibi.

LEDONIA HIRSUTA. Spach.

HAB. Ad Braccaram Augustam, et alibi in Lusitaniā.

STEPHANOCARPUS MONSPELIENSIS. Spach.

HAB. Per totam Hispaniam meridionalem vulgatissimā.

CISTUS CRISPUS. Linn.

HAB. In montibus Saguntinis, Arundinensibus, et alibi per totam Bæticam.

CISTUS ALBIDUS. Linn.

HAB. Per totam Hispaniam meridionalem cum *C. salvifolio* vulgaris.

CAPPARIS SPINOSA. Linn.

β inermis *C. ovata.* Desf! *C. Fontanesii.* DC. *C. ru-*
pestris. Sibth. et Smith.

HAB. α In rupestribus propè Malacam, *Velez Malaga, Alhama*
et alibi. β In rupibus maritimis agri Lucentini.

CLEOME VIOACEA. Linn.

HAB. Circà Malacam, Cordubam (*Rev. Muñoz*), et alibi in
Bæticâ.

CRAMBE FILIFORMIS. Jacq.

C. Hispanica. Linn?

C. reniformis. Desf.

HAB. In montibus Malacitanis, propè oppidulum *Carratraca*,
et ex cl. Rambur in torrentium alveis circà Eliberim.

Obs. Through what accident Jacquin located this plant in Patagonia I am unable to ascertain. The specimens preserved under this name in the herbarium DC. are identic with the Spanish plant as found by M. Rambur and myself, whilst those cultivated by Desfontaines in the Paris garden differ only in the greater magnitude of their leaves. On examining Jacquin's figure I have no doubt of its belonging to this plant, whether it be really indigenous, which is very improbable, in the austral hemisphere, or whether that locality was assigned it through error. In the absence of authentic specimens of the *C. Hispanica* of Linnæus I am unwilling to unite it with the above species, though I have little doubt of their identity.

CAKILE MARITIMA. Scop.

C. Americana. Nutt. ex specimine Canadensi.

C. Cubensis. H. B. et Kunth!

HAB. In littore Tarragonensi, ad ostium Iberi, et in littoribus
Bæticis frequens.

RAPISTRUM RUGOSUM. Boerh.

HAB. In totâ Hispaniâ meridionali et in Lusitaniâ vulgare.

RAPHANUS RAPHANISTRUM. Linn.

HAB. In arvis Hispaniæ meridionalis vulgaris.

RAPHANUS SATIVUS. Linn.

β Gayanus *Raphanistrum Gayanum.* Fisch. et C. A.
Mey.

HAB. Huc illuc hortis elapsa.

OBS. Since the publication of the remarks on *R. sativus*, *Linn.* in the *Phytographia Canariensis* (pag. 83, tab. 8 A, fig. 18-24). Professors Fischer and Meyer (*Index 4 sem.* pag. 44) have formed the *Raphanistrum Gayanum* from the variety *thercin* named of *R. sativus* which is distinguished by the articulation at the base of the pod, for there is no other difference. I have since carefully cultivated several garden sorts, and they have yielded me these two varieties indifferently at different times, but when left to sow themselves they have assumed entirely articulated pods, frequently even strangulated between the seeds as in *Raphanistrum*. I am inclined therefore to conclude that this second variety is the normal form of the species though to distinguish it, it must continue to bear the name of the learned and accurate observer who first noticed it. My experience as yet has been as follows. Of six varieties bought at a seed shop the yellow (1) and violet alone produced all their pods articulated, the large variety called *raifort* produced some plants with articulated, some with entire pods. On the following year the first two varieties, bought at a different shop, produced very few plants with articulated pods, whilst the grey variety had all its pods articulated. The disappearance of the lower articulation is effected, not by its abortion, but as may be easily seen in several varieties, by its coalition and fusion with the upper, a process which takes place likewise in the beak of the fruit of *Sinapis arvensis*, *Linn.* The dissepiment confounded by me formerly with the enclosing membranes (*Phyt. Can.* p. 84), exists, and the pod is decidedly bilocular.

ERUCARIA ALEPPICA. Gaert.

HAB. In montosis circà *Onil* et alibi in Bæticâ.

HIRSCHFELDIA ADPRESSA. Moench.

Sinapis incana. *Linn.*

HAB. Ubique in Hispaniâ et Lusitaniâ meridionali.

OBS. *Hirschfeldia* differs only from *Erucaria* by the conformation of its embryo. The radicule is incumbent in both, but in *Hirschfeldia* the cotyledons are conduplicated, that is their sides are folded inwards as in *Sinapis*, whereas in *Erucaria* their upper extremity is folded downwards, so as to form whith the radicule a spiral convolution. This is the only essential difference between the two genera, and I know not whether it is sufficient to keep them asunder. This will depend on the importance which shall be found to belong to the pliations of the embryo in the formation of natural groups in this family, being the divers means which nature has imagined to pack it in a convenient compass. It remains to be seen whether she has accomplished this indifferently in various ways in all the most natural groups.

BRASSICA CHEIRANTHOS. Vill.

β *montana*. *DC.*

HAB. α In Lusitaniâ montibus Lunâ. β In alpibus Eliberitanis.

(1) The names used by gardeners allude to the colour of the root.

BRASSICA FRUTICULOSA. Cyr.

HAB. In montosis inter Eliberim et Portum Magnum.

BRASSICA SABULARIA. Brot.

HAB. Propè Olisiponem ad sinistram Tagi ripam.

ERUCASTRUM OBTUSANGULUM. Reichb.

HAB. In provinciâ Tarragonensi.

DIPILOTAXIS CATHOLICA. DC.

D. virgata. DC!

HAB. Circâ Hispalim, Malacam, et alibi in Bæticâ et Lusitanâ copiosissima.

DIPILOTAXIS HISPIDA. DC.

D. pendula. DC.

D. crassifolia. DC.

HAB. In rupibus maritimis propè Lucentum.

EUZOMUM ERUCOIDES. Spach.

HAB. Copiosissimum circâ Barcinonem.

MORICANDIA ARVENSIS. DC.

HAB. In campis petrosis circâ Lucentum et alibi in Bæticâ.

MORICANDIA RAMBURII.

M. foliis crassis, *subacuminatis*, inferioribus lanceolato-spathulatis, in petiolum attenuatis, superioribus ovatis, amplexicaulibus; floribus magnis; ovario *cylindraceo*, styloque *elongato*; stigmate *suborbiculari-claviformi*; siliquis *longis*, compressiuseulis, valvulis nervo medio subcarinatis, nervulis *utrinque 2 anastomozantibus* *irregulariter stipato*; seminibus ellipsoideis, submarginatis, *uniseriatis*.

HAB. In arenâ torrentis *Genil* circâ Eliberim, et ex cl. Rambur in fissuris rupium montium Malacitanorum.

OBS. Though this species deviates remarkably from the character of the genus, in having its seeds uniserial, yet is it in every other respect a true *Moricandia*, and so like the original species as not to be distinguished from it at first sight. The seeds are much larger than in *M. arvensis*, and this has probably caused the suppression of the opposite ovules, for they do not seem to abort, as there are no traces of their previous existence in the ovary. The ovules are placed farther apart, the pod is narrower, and they have thence arranged themselves one after the other. I have likewise met with uniserial pods in *M. arvensis*, the character therefore is not important. *Moricandia* modified to admit this new inmate will still differ from *Brassica* (and a part of *Sinapis* Auctt.) by its purple flowers, its ovoid or elliptical subemarginate seeds, and its general habit, and above all by its stigma decurrent exteriorly on each side of the style,

and not capitated as in *Diplotaxis*, DC. and *Euzomum*, Spach (*Suites à Buffon*, vol. 6, pag. 580). This latter character will exclude from the genus *M. hesperidifolia*, DC. which is a *Diplotaxis* and very nearly allied to *D. erucoides*, DC., or rather it must become *Euzomum hesperidiflorum*, since *Euzomum* forms a very useful division containing the purpleflowered *Diplotaxis*, and bearing about the same relation to that genus that *Moricandia* does to *Brassica*. The *Brassica teretifolia*, Desf. appears to be altogether a real *Moricandia*. I have followed the plan of Professor Koch and placed the epithets more decidedly diagnostic in Italics, in order to bring at once to view the essential differences between *M. Ramburii* and *M. arvensis* to which it comes very near.

MATTHIOLA TRISTIS. R. Br.

HAB. Ad thermas Lucentinas nunc *Ayguas*, in monte *Sierra de Tela*, et alibi in Bæticâ.

MATTHIOLA SINUATA. R. Br.

HAB. Circâ Malacam (*Rambur*).

MATTHIOLA TRICUSPIDATA. R. Br.

HAB. Circâ Malacam (*Rambur*).

MATTHIOLA LUNATA. DC.

HAB. In collibus Saguntinis, et in montibus *Alpujarras*. An à præcedente verè diversa?

MATTHIOLA PARVIFLORA. R. Br.

HAB. In campis aridis ad Charidemum promontorium, et ex cl. Rambur et Salzmann in arenosis circâ Malacam.

MALCOLMIA LITTOREA. R. Br.

HAB. In arenosis circâ lacum Valentinum *la Albufera*, et ad Durii et Tagi fauces.

MALCOLMIA AFRICANA. R. Br.

HAB. Ad littora Barcinonis et Tarragonis.

MALCOLMIA PARVIFLORA. DC.

HAB. In arenosis Malacitanis.

MALCOLMIA LACERA. DC.

HAB. Circâ Cordubam, Malacam, et in totâ Bæticâ vulgaris.

CARDAMINE HIRSUTA. Linn.

HAB. Circâ Barcinonem, Eliberim, et alibi in Bæticâ.

BARBAREA PRÆCOX. R. Br.

HAB. In humidiusculis Bæticæ frequens.

ERYSIMUM CANESCENS. Roth.

HAB. In monte *Sierra Tejeda*.

PACHYPODIUM COLUMNÆ.

Sisymbrium Columnæ. Jacq.

HAB. Circè Malacam et in agro Tarragonensi.

PACHYPODIUM ERYSIMOIDES. Webb. et Berth.

Sisymbrium erysimoides. Desf.

Sisymbrium nitidum. Zea. S. rigidulum. La Gasc.

HAB. In Bæticæ arvis et ruderatis.

DESCURAINIA IRIOD. Webb et Berth.

Sisymbrium Irio. Linn.

HAB. In agro Barcinonensi, Malacitano, et alibi.

DESCURAINIA PINNATIFIDA.

Sisymbrium pinnatifidum. DC.

HAB. In monte *Sierra Nevada*.

ALYSSUM CALYCINUM. Linn.

HAB. In apricis Bæticis et provinciæ Tarragonensis frequens.

ALYSSUM CAMPESTRE. Linn.

HAB. Circè Tarragonem.

ALYSSUM ATLANTICUM. Desf.

HAB. In montosis Malacitanis.

ALYSSUM ALPESTRE. Linn.

HAB. In montosis circè oppidum *Carratraca*.

ALYSSUM SERPYLLIFOLIUM. Desf.

HAB. Circè Eliberim.

KONIGA MARITIMA. R. Br.

HAB. In apricis maritimis frequens.

KONIGA HALIMIFOLIA. Reichb.

Alyssum longicaule. Boiss.

HAB. In monte *Sierra Tejeda*, et in monte *Sierra de Alfacar* ex
cl. Rambur.

OBS. In the *Phytographia Canariensis* I adhered to the opinion of

Professor Koch, and adopted as more ancient the genus *Lobularia*, but it appears that this name has been otherwise employed in zoology, Koniga therefore of right takes its place. Professor Reichenbach has placed our plant in this genus, and M. C. A. Meyer has created *Ptilotrichum* for two plants of northern Asia which may likewise form a part of it. The only difference in these plants consists in the number of the proeminences of the glandular ring, a matter not of generic importance as far as our present knowledge of that organ extends, whilst by uniting them we bring together species very nearly allied. Koniga will thus absorb *Ptilotrichum*, and admit several other species.

KONIGA LAGASCÆ.

Alyssum purpureum *La Gasc.* *A. dubium* *Bory.*

HAB. In rupestribus excelsis montis *Sierra Nevada*.

HUTCHINSIA PROCUMBENS. *R. Br.*

HAB. In mœnibus et ruderatis circâ Gades.

HUTCHINSIA PETRÆA. *R. Br.*

HAB. In rupibus montis *Picacho de Alcalá*.

LEPIDIUM LATIFOLIUM. *Linn.*

HAB. Circâ cœnobium Divi Michaelis Angelorum propè Malacam.

LEPIDIUM CAMPESTRE. *R. Br.*

HAB. In agro Tarraconensi.

LEPIDIUM SPINOSUM. *Linn.*

HAB. In siccis apricis Bæticæ.

LEPIA STYLATA.

Lepidium stylatum. *La Gasc.* et *Rodr. An. Cienc. Nat.* vol. 5. pag. 276.

HAB. Propè cacumen montis *Sierra Nevada*.

OBS. This species is perfectly distinct, though nearly allied to *Lepia oxyota* and *Lepia bonanniana*, Presl. Varieties probably of the same form.

ÆTHEONEMA SAXATILIS. *R. Br.*

HAB. In monte *Sierra Nevada* (*Rambur*).

SENEBIERA PINNATIFIDA. *DC.*

HAB. In ruderatis frequens.

CORONOPUS RUELLII. *Hall.*

HAB. Circâ Malacam et alibi in Bæticâ.

THLASPI MONTANUM. Linn.

HAB. In agro Barcinonensi, et in rupestribus montis *Picacho de Alcalá*.

DRABA AIZOIDES. Linn.

D. involuta Agardh in herb. Haens!

HAB. In altioribus montis *Sierra Tejeda* et *Sierra Nevada*.

Obs. This little plant differs from the commoner varieties of *D. aizoides* merely by its more hairy pods, and by its umbelliform inflorescence arising from the development of the main stem being impeded by heat and drought. It is perhaps the Spanish form which Professor DC. in the *Prodromus* unites with *D. cuspidata*. M. v. Bieb.

IBERIS LINIFOLIA. Linn.

HAB. In arvis Bæticis.

IBERIS UMBELLATA. Linn.

HAB. In monte *Sierra de Alfacar* (*Rambur*).

IBERIS GIBRALTARICA. Linn.

HAB. In rupibus præruptis montis *Calpes*.

IBERIS SEMPERVIRENS. Linn.

I. Garrexiana. All.

HAB. In montibus Bæticis frequens, et in monte *Arabriga*.

IBERIS SPATHULATA. Berg.

HAB. In monte *Sierra Tejeda*.

JONDRABA SULPHUREA. Mœnch.

HAB. In Bæticâ frequens.

BISCUTELLA APULA. Linn.

HAB. In Bæticæ arvis.

BISCUTELLA MICROCARPA. DC.

HAB. In arenosis circâ oppidum *Alcalá de los Gazules*, et (ex Brouss. in herbario Fontanesiano) circâ *Divi Rocci* oppidulum, undè descriptsit celeb. DC. Priori valdè affinis, à cuius varietate ciliatâ forsitan non diversa.

BISCUTELLA LÆVIGATA. Linn.

HAB. Innumeræ varietates per totam Hispaniam et Lusitaniam australem.

CARRICHTERA VELLÆ. DC.

HAB. In arvis Bæticis.

VELLA SPINOSA. Boiss.

HAB. In monte *Sierra Tejeda*, et alibi in montosis Bæticis.

GLAUCIUM CORNICULATUM. Curt.

HAB. In agro Tarragonensi vulgare.

ROEMERIA HYBRIDA. DC.

HAB. In arvis Tarragonensibus.

PAPAVER HYBRIDUM. Linn.

HAB. In arvis ubiquè cum *P. Rhæade*, *Argemone*, et *dubio*.

HYPECOUM PROCUMBENS. Linn.

HAB. In agro Barcinonensi.

HYPECOUM PATENS. Willd.

HAB. In arvis Eliberitanis.

NYMPHÆA ALBA. Linn.

HAB. In aquosis circà Sancti Caroli oppidulum, flos et folia minora quam in speciminibus normalibus.

BERBERIS CRETICA. Linn.

HAB. In monte *Sierra Tejeda*, et ex cl. Rambur in montibus de la *Sierra Nevada*.

THALICTRUM FLAVUM. Linn.

HAB. In agro Tarragonensi.

THALICTRUM MINUS. Linn.

HAB. In monte *Sierra Nevada*.

ANEMONE PALMATA. Linn.

HAB. Circà oppidulum *Divi Roccii* ad fretum Herculeum, et in totius Bæticæ campis et collibus vulgaris.

HEPATICA TRILOBA. Chaix.

HAB. In dumetis agri Tarragonensis.

CLEMATIS FLAMMULA. Linn.

HAB. Circà oppidum *Velez Malaga* et in totâ Bæticâ communis.

CLEMATIS CIRRHOSEA. Linn.

HAB. Circà Hispalim, *Alcalá*, et per totam Bæticam copiosa

ADONIS INTERMEDIA. Webb. et Berth. *Phyt. Can.* pag. 12.

HAB. Inter segetes in Bæticâ et in agro Tarragonensi frequens.

Obs. Not having figured this species in the *Phytographia Canariensis* I shall take the opportunity of publishing it with further details in the Iconography of Spanish plants.

RANUNCULUS HEDERACEUS. Linn.

HAB. In aquosis Gaditanis.

RANUNCULUS ACETOSELLÆFOLIUS. Boiss.

HAB. In monte *Sierra Nevada* propè nivis apothecas, et in pratis Alpinis vallis Divi Johannis. Species pulcherrima R. nivali affinis.

RANUNCULUS GRAMINEUS. Linn.

β sericeus.

HAB. In monte Arabrigâ, β in monte *Sierra de Agua*, et ex cl. Rambur in monte *Sierra de Alfacar*.

Obs. The variety β which I was first inclined to consider as a species, differs only from α in having longer leaves covered with a soft silky white pubescence exactly as in R. Illyricus. The specimens from the Serra da Arrabrida have a commencement of pubescence, and the Andalusian plant becomes ultimately glabrous, so that there is nothing sufficiently stable in this variation to constitute a specific distinction.

RANUNCULUS BULLATUS. Linn.

HAB. In rupibus apricis promontorii Calpes, in collibus Málitanis, et alibi in Bæticâ.

RANUNCULUS MONSPELIACUS. Linn.

HAB. Propè *Montachique* in Lusitaniâ, ubi copiosissima.

RANUNCULUS CHÆROPHYLLUS. Linn.

HAB. In monte *Sierra de Agua*, et in monte Arabrigâ.

RANUNCULUS PARVIFOLIUS. Linn.

HAB. In montibus Tarragonensis et Bæticis, et in Lusitanæ monte Arabrigâ.

RANUNCULUS REPENS. Linn.

HAB. In pratis agri Barcinonensis.

RANUNCULUS BEMISSUS. DC.

HAB. In monte *Sierra Nevada* (*Rambur*). Specimina Bætica nullo modo à stirpe à cl. Billardiero in summo Libano lectâ differunt.

HELLEBORUS FOETIDUS. Linn.

HAB. In Hispaniâ Tarragonensi circâ Barcinonem.

NIGELLA DAMASCENA. Linn.

HAB. In arvis Tarragonensis et per totam Bæticam.

NIGELLA HISPANICA. Linn.

HAB. In agro ditissimo, *la Huerta*, urbis Lucenti.

DELPHINIUM PEREGRINUM. Linn.

HAB. In arvis Bæticis passim.

ACONITUM NAPELLUS. Linn.

HAB. In locis humidiusculis montis *Sierra Nevada*.

ACONITUM LYCOCTONUM. Linn.

HAB. In petrosis altioribus montis *Sierra Nevada*.

PÆONIA CORALLINA. Linn. β Russi.

P. Russi. Biv.

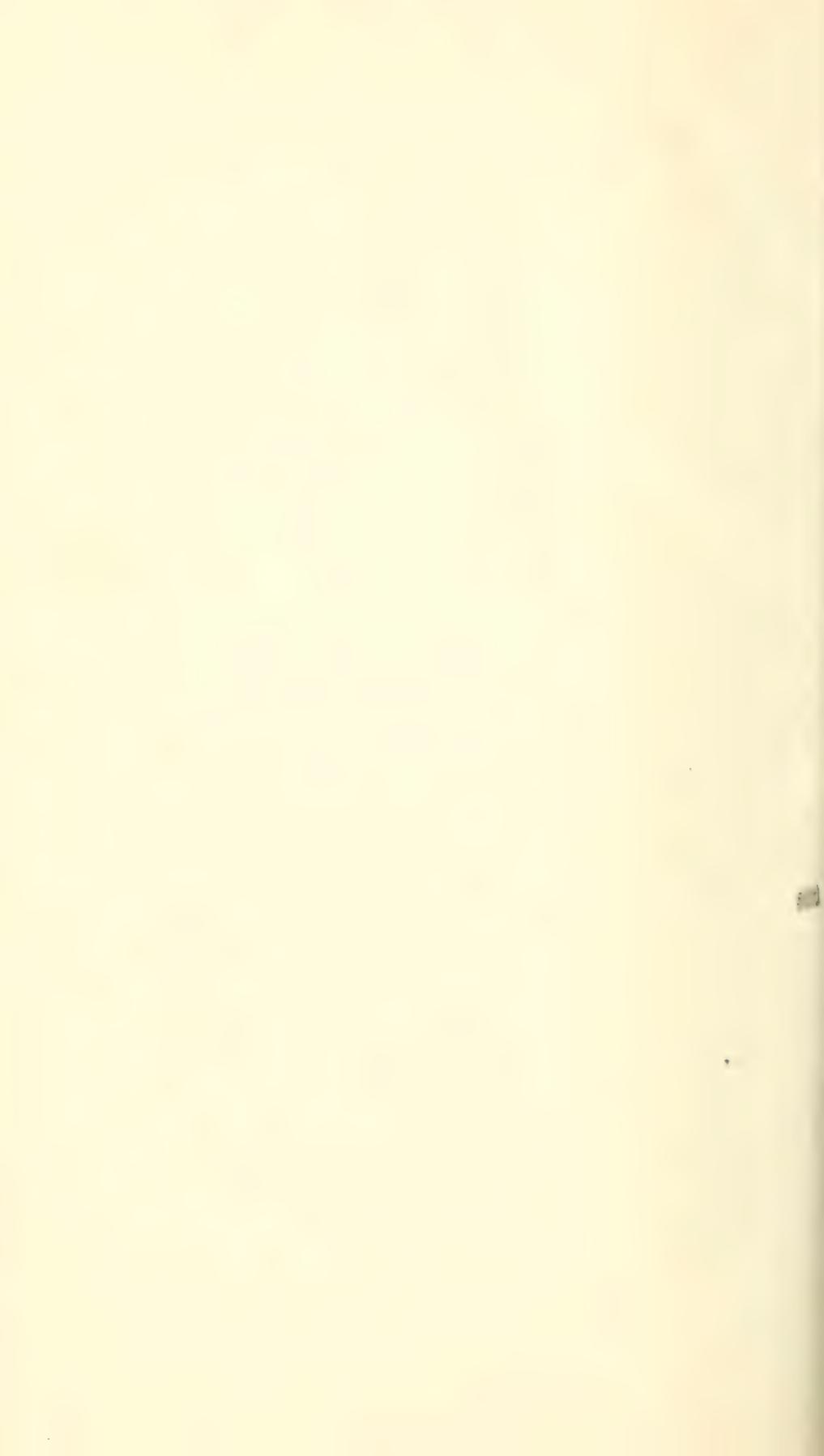
HAB. In monte *Sierra Tejeda*.

PÆONIA OFFICINALIS. Linn. Var. *lobata*.

P. lobata. Desf.

HAB. In Lusitanâ loco non notato.







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